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# Milk Producers' Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE

Volume IX

West Chester, Pa., and Philadelphia, Pa., May, 1928

No. 1

## Low Test, Like Charity, May Begin at Home

F. M. TWINING, Director

Field and Test Department, Inter-State Milk Producers' Association, Inc.

Bill Jones was mad! Mad clear through. The milk check had just come, and when Bill saw that he had been paid on a test three points lower than last month, he said things. And when he had time to stop and think things over, he said some more things. Just what Bill said had better not be printed. Those who heard him, admit that he did not flatter the honesty and integrity of his milk dealer or milk dealers and milk testers in general.

In the first place, Bill had had trouble with his butterfat test before, and had sold one of his Holstein cows and bought a Guernsey to bring up the test, and not only that but the cow testing association tester had made an average test the previous month, three points higher than the one on the check stub.

On the face of things you can't blame Bill much for getting hot under the collar, and telling his wife, his boy and girl, and the hired man just what he thought of the "Pure Milk Company."

It would be difficult to attempt to account for the reason that caused the test of Bill's milk to take such a decided drop. The trouble may all have been at the cooling station or it may have been due to a number of things that could have happened before the milk ever got to the cooling station.

A few years ago, before test operators were licensed and glassware was standardized, lack of knowledge of how to test milk and slipshod methods were quite common. Adequate State Laws and eternal vigilance, working hand in hand, in the Inter-State Milk Producers' territory have now reduced the number of errors to a very small proportion of all the great number of tests that are made each month.

Too often the causes of low but-



The Use of Parchment Paper Covers Will Save You Money

terfat tests are due to things that happen to the milk before it reaches the weigh tank of the dealer. These occurrences are numerous, varied, and in most cases, preventable. Any one of many daily occurrences can cause enough difference in the test to make more than one Bill Jones use strong language.

For instance the fact that Bill had sold one of his Holstein cows giving 50

lbs. of 3% milk and had replaced her with a Guernsey cow giving 25 lbs. of 4% milk, did help improve his test somewhat, but not nearly as much as he had anticipated, as the following figures will show.

9 cows producing 315 lbs. of 3.25% milk, equals 10.237 lbs. fat.

1 Holstein cow producing 50 lbs of 3% milk, 1.500 lbs. fat. Total lbs. milk 365. Total lbs. fat 11.737.  $11.737 \div 365 = 3.21\%$  test before changing.

9 cows producing 315 lbs. of 3.25% milk, 15.237 lbs. fat.

1 Guernsey cow producing 25 lbs. of

3.6, 4.25, 4.0, 3.8, and 3.8%, a variation from 3.6% on the lowest day, to 4.3% on the highest day. This is a typical example. Some herds show even greater variation. Had the cow tester come on the 2nd, 5th, 7th, or 11th day, his average test would have been the same as that of the dealer, but the chances were 9 to 4 that they would not be the same. There were four days on which his average test would have been higher and 5 on which they would have been lower, and four when they were just the same.

Nearly everyone knows the value of



PROPERLY FITTED CAN LIDS AVOID LOSS

4% milk, 1,000 lbs. fat. Total lbs. milk 340. Total lbs. fat 11.237.  $11.237 \div 340 = 3.3\%$  test after changing.

Next, in regard to the difference between the test made by the cow testing association representative and the test used as a basis of payment by the milk man, the former average was from samples of one day only and the latter from a composite sample taken from each day's shipment for a two weeks' period.

Samples taken daily from the milk of the same herd of cows have been found to vary widely from one day to another. A herd that may average 4% in butterfat for a two weeks period, will on certain days in that period, test over 4% and on some days under 4%.

The Field and Test Department of the Inter-State Milk Producers' Association frequently takes daily samples from the milk of the same herds during an entire pay period. The milk sold by one of our members which averaged just 4%, as was shown by the composite sample, tested from day to day as follows; 4.15, 4.0, 4.3, 4.1, 4.0, 3.9, 4.0, 3.65,

cow testing association work for herd improvement, but cow testing association figures must be averaged over a considerable period of time to be of value, and are not indicative of what to expect on the pay check, and it is more of a miracle than otherwise when the average test for one day happens to check with the actual average test for a month or half month period.

Everyone recognizes that there are certain conditions affecting both production and butterfat test that are beyond the control of man. Weather conditions, change of season and duration of lactation periods may influence both factors. If all the low testers of a herd happen to be fresh at about the same time, comparatively lower figures may be expected on the pay check, or if a long period of wet weather and abundant pasture is followed by a drought, look out for low tests.

There is also a period just before cows are let out to pasture in the spring of the year when the fat tests are quite likely to drop. There are many who

think that this is due to the cows shedding their winter coats. There is a strong probability that the lower fat tests at this time of year are caused by the cows fretting to get out of doors.

### How Do Losses Occur?

It is the purpose of this article, however, to deal with those sources of loss which can be prevented by constant care and careful attention, rather than those which are beyond the dairymen's power to control.

The most common causes of such losses in test are due to one of two things: (a) Actual loss of cream through one of the following sources:

- (1) Leaky or loose fitting can lids.
- (2) Rough handling.
- (3) Theft.

(4) Removal of milk for private use from the top layer of can. (Often unintentionally).

(b) Through physical changes in the composition of the cream before it reaches the cooling station, caused by:

- (1) Freezing.
- (2) Partial churning.

The greatest source of actual loss of cream is from leaky and loose fitting can lids and fortunately this condition is easy to control. Here we can take a lesson from the milk dealer, who without exception, never ships a can of milk without placing a parchment paper cover over the neck of the can before putting on the lid.

Not only does the parchment paper prevent slopping, but it also helps to prevent cream from freezing to the top of the can lid in extremely cold weather and helps prevent cream from churning in hot weather.

Most dairy supply houses sell parchment paper which is very inexpensive. Do NOT use any other kind of paper. It is best to wet the parchment paper



Proper Stirring of Milk Cans Prevents Loss of Cream in Shipment

with cold water before placing it over the neck of the can.

Rough handling of milk cans is an annoyance that should probably have been grouped with conditions beyond control, for certainly it is very hard to control the surplus strength of some of the Jack Dempseys who drive milk trucks to cooling stations and city plants.

It is a very good plan to thoroughly stir the milk with a sanitary metal stir-

(Continued on page 10)



## Soy Beans for Hay\*

J. W. WARNER, County Agent, Indiana, Pa.

The most expensive part of a cow's ration is protein. Nitrogen, which is the most important element in protein is also the most expensive part of a mixed fertilizer.

Any dairyman who expects to make money must plan to grow most of his protein on the farm with leguminous crops.

The dairyman who is growing all the alfalfa hay he needs and all the silage corn he needs is not interested in soy beans. It is a question whether a good dairyman has any business growing anything but silage corn and alfalfa.

The dairyman who has not brought his farm to the condition of growing alfalfa or whose alfalfa may have frozen out or does not have enough good clover hay or has land that is too poor to grow good oats or whose land is not sufficiently lined even to grow clover will find soy beans to be one of the best crops for his conditions.

Soy bean hay has proven out in several experiments in different states to be a more efficient milk producer than alfalfa hay, in fact soy bean hay is 1.7% higher in true digestible protein than alfalfa hay. According to the Arnsby standards alfalfa hay contains 7.1 pounds of true digestible protein per hundred and 34.23 therms of energy. Soy bean hay contains 8.8 pounds protein and 44.03 therms of energy per hundred pounds. Soy bean hay is 1% higher in protein than oats. Timothy hay contains only 2.2 pounds protein per hundred pounds. A ton of soy bean hay therefore contains as much protein as 4 tons of timothy hay.

Practically all dairymen who have fed soy bean hay will testify that it is greatly relished and that it is a great milk producer.

Many dairymen will profit by substituting considerable of their oats acreage to soy beans. A 40 bushel crop of oats which may be considered average gives 1280 pounds of feed. The same acre of land which is capable of producing 40 bushels of soy will produce at least 1 1/2 tons soy bean hay. In other words there

will be almost 2 1/2 times as much feeding value from the acre of soy beans as from oats.

A farmer who has failed to get a good catch of clover and whose hay will be mostly timothy had better plow the timothy sod and sow soy beans. The soy beans are sure to make a heavier tonnage of hay and from the protein standpoint each ton of hay will be equal to four tons timothy. We do not need to worry much about the energy side of the ration as any cow which gets plenty of feed will be supplied with sufficient energy.

Soy beans are not a difficult crop to grow, however, there are a few requirements which must be met. The varieties for hay throughout central and most parts of Pennsylvania are Wilson, Virginia, Manchu, Midwest, Elton and several others not so commonly known. Wilson is one of the easiest beans to buy as they are nearly always quoted on the market. The hay from Wilson's is not very coarse. Virginia is almost the same as Wilson for hay, but requires a few days longer season. Midwest has been a very good bean in several parts of Pennsylvania but the seed is not always available.

The usual rate of seeding is about 1 1/2 bushels per acre. It is better to use more than this amount rather than less. One of the worst enemies of soy beans is Fall Grass or Fox-tail. It the beans are too thin on the ground the weeds have a better chance. The time of seeding is corn planting time or soon thereafter. The ground should be fully as warm as for planting corn. Every precaution should be taken in preparing the soil to kill the surface weed seeds as weeds are often very serious. The ground should either be plowed considerable time in advance and harrowed frequently or else the ground should be plowed, harrowed and sown at once.

It is important that the beans be drilled very shallow. Soy beans are like any other beans. The whole bean comes up. The grain drill is the best method of seeding but the hose should be set so

that the beans are just covered. Many poor stands can be attributed to too deep seeding.

Soy beans should always be inoculated unless grown on soil which has had soy beans during the past five years. The easiest, surest and cheapest method is to use soil from a soy bean field moistening the seed and sifting in some soil and then mixing so that all seeds have some dirt adhering.

On land which is in a high state of cultivation very little difference can be noted between inoculated and uninoculated seed, but on thin land the difference is remarkable. I have seen inoculated beans almost twice the height of uninoculated plants and the color of the uninoculated plants was a sickly yellow. We are also informed by good authority that the beans grown when inoculated produce a higher quality hay. The grain drill should ordinarily be set as for seeding oats.

It is well to use 200 lbs. or 300 lbs. acid phosphate per acre for soy beans. They are benefitted by an application of lime if the soil is acid but one of the greatest advantages of soy beans over most legumes is that they will tolerate strong acidity. I have seen an acre of soy beans yield a large load per acre on land which was so poor that the adjoining four acres of oats was hauled in one load.

Perhaps more people do not grow soy beans because they hear about the difficulties of curing than for any other reason. There are seasons in which it is difficult to get the hay properly cured but the hay is so valuable that it is worth the trouble to cure it. There are still a lot of farmers in Pennsylvania who apparently do not realize that tractors, trucks, automobiles and dairy cows do not thrive on timothy hay. It is usually the timothy hay farmer who raises an objection to soy beans on the argument of curing. I have never yet seen a real, honest-to-goodness farmer who has said that soy beans could not be properly cured.

The big thing in curing soy beans as

in curing alfalfa is to save the leaves. This means that the hay must be handled in the morning before the leaves become too brittle. The modern method of making alfalfa hay using the side delivery rake immediately following the mower and rolling into small, loose windrows and turning every two or three days with the side delivery is the best method. The time for cutting is just when the beans are starting to form in the pods.

Soy beans will stand more abuse perhaps than any other hay crop and even though they become as black as your hat and even slightly moldy, cattle, horses and sheep relish them and with apparently no disorder. I know of some farmers who have been three weeks in getting their soy beans cured during bad weather.

When one considers that fact that soy bean hay and especially the leaves are almost equal to grain pound for pound, it is evident that a little time can be spent in getting the hay cured. Pennsylvania farmers have gotten so in the habit of growing timothy hay, and it is hard to break a habit that soy beans are not becoming as popular as one would suppose.

The most valuable features of the soy bean crop are:

1. Its high protein content and value as a dairy feed.
2. Its ability to thrive on very poor soils and on soils which have not been limed.
3. The ease with which the crop can be fitted into a rotation, taking the place of oats or even of a timothy sod where the clover has not wintered through.
4. The reduced amount of labor in a rotation with soy beans. The soy bean stubble can be drilled to wheat or rye without plowing as is necessary with oats stubble.
5. The small investment per acre in growing the crop.
6. The fact that soy beans are a leguminous crop and therefore a soil benefactor rather than a robber.

\*An article presented at the Spring Meeting (1927) of the Pennsylvania Dairywomen's Association, held at State College, Pa.

## How to Store Feed and Avoid Damage

Sick cows, hogs, horses, steers or poultry are often the result of spoiled or bad feed, and spoiled feed is often the direct result of improper storage of the feed somewhere along the line from the mill to the animal. Each year feed dealers and consumers all over the country pay heavy toll in dwindled profits caused by just this one thing. A knowledge of how to store feed so it will keep in good condition will prove valuable to any farmer or feeder.

Thousands upon thousands of farmers, dairymen and poultrymen, have learned the way of taking certain precautions to insure safe keeping of their feed. They have learned where to store it and how to pile it to prevent burying a few bags at the bottom of the pile for the entire season. Here are some of the methods they are using.

Before leaving the mill, feed stuffs are fresh and sweet. In transit the roof of the freight car might leak and rain may drip on the bags. Any grain product

will become musty or moldy when it gets damp or wet, and then it becomes unfit for feed. Musty or moldy feed can easily be detected by its odor and all such bags of feed should be examined carefully at the car door.

### Where to Store

Feed should be stored in a dry place and it should not be piled on a dirt or cement floor where the moisture can be absorbed. It should never be piled in a place where rain may leak on it.

### Allow Air Circulation

Many feeders who store a winter supply of feed use a simple rack which is placed on the floor. The feed is then piled on the rack in such a way that air is allowed to circulate around the bags. A rack of that sort may be made by placing boards on two-by-fours laid on the floor. Then, in piling the bags, leave a space of three or four inches between each row. Poultrymen and others who must store their feed during the

warm summer months, when "heating" and other damage is most likely to occur as a result of weather conditions, will do much to reduce this natural risk by allowing ventilation around the bags.

### Rats

Rats will do considerable damage in cutting bags and wasting feed, and a cat will do more to prevent the ravages of rats than anything else. Keep a good cat. When a space is left between the rows of bags Puss can maneuver from aisle to aisle and make short work of marauding rats.

Always use the older feed first. When you receive a fresh supply, don't pile it on top or in front of the old feed. Bags left on the bottom may stay there much longer than you think and then some spoilage may occur unless the storage conditions are perfect. By watching which bags are removed when sales are made, you can always be sure of a fresh supply in your barns.

### Second Hand Bags Are Valuable

Save your bags. Don't cut bags when you open them. If the thread only is cut when opening, no damage is done to the bag. Don't cut the thread on the side that shows a double stitch. Turn to the single stitch side and cut on the right hand end, so that the threads will rip out easily.

When you pile the empty bags, sort them out carefully for the different sizes, separating the ones that are torn from the good ones. You can usually get better prices for empty bags when they are sorted as to condition, than if you simply sell them as they come. When you have accumulated a reasonable number, see your feed dealer. He may be able to handle them for you, but if he cannot, write the nearest mill from whom you obtained the feed and they will send you the names of second-hand bag companies that will handle them for you.

## Cow Testing Associations in Pennsylvania

### Brief Summary of Pennsylvania Cow Testing Association Records for 1927

The Cow Testing Association work in Pennsylvania continued to make material progress during the calendar year 1927. There were 20,880 cows on test during all or part of the year, a gain of 4277 over the previous year.

There was an average of 15,084.37 cows on the entire year basis. The average production per cow was 7695 pounds of milk and 302.3 pounds of butterfat, an increase of 110 pounds of milk and 7.9 pounds of butterfat over last year. Thousands of cows on test for the first time are included in this summary otherwise gain in production would have been much greater.

This is the first year in the history of Pennsylvania Cow Testing Associations that the average for all associations in the state was more than 800 pounds of butterfat. There was an increase of eight associations over the previous year.

### Coventry Cow Testing Association Sixth Annual Report

The Coventry Cow Testing Association finished its sixth year, March 1st, 1928, with nineteen whole year members and two part year members. There were 597 cows in the Association during all or part of the year. There was an increase of 253 pounds milk and 53 pounds butterfat above previous year's results.

The result for the Association members was as follows:

Total average No. cows in Association.....	461.48
Average per cow—	
Pounds milk .....	8107.
Pounds butterfat .....	313.6
Percentage of butterfat .....	3.9
Value of product .....	\$354.15
Cost of roughage, including hay .....	59.67
Cost of grain .....	59.20
Total cost of feed .....	118.87
Value of product above feed cost .....	235.28
Return for \$1 expended for feed .....	2.98
Feed cost per 100 lbs. milk .....	1.47
Feed cost per pound fat .....	.38

Ten herds with an average of 5 or more cows exceeded an average production of 300 pounds of butter fat. A list of those herds follows:

Owners	Average No. Cows	Breed	Lbs. Milk	Lbs. Fat
State Institution, Peshurst.....	34.92	R. H.	11,567	404.6
Porter Farms, Phoenixville.....	34.58	R. G.	7,480	374.5
Arthur High, Pottstown, R. 2.....	10.25	R. & G.H., G.G.	10,381	361.4
H. L. Stoltzfus, Pottstown, R. 2.....	17.00	R. H.	10,191	347.5
Wm. High, Phoenixville, R. 4.....	16.42	R. H.	9,582	336.0
Harry J. Bickel, Pottstown, R. F. D.....	17.00	R. H.	9,234	322.5
F. H. Harjus, Jr., Valley Forge.....	16.50	R. G.	6,663	321.5
Furman H. Gyger, Kimberton.....	24.42	R. H. & G. G.	8,404	306.3
Harry Supiot & Sons, Phoenixville.....	23.92	R. & G.H. & G.G.	8,722	305.6
N. A. Mathews, Pottstown, R. 2.....	13.75	G. H.	7,725	300.9

### Juniata Cow Testing Association Fifth Annual Report

The Juniata Cow Testing Association finished its fifth year on April 1, 1928, with 23 whole year and three part year members. There were 259 cows in the Association during all or part of the year.

The report for the five years testing is as follows:

Year	Aver. No. Cows	Lbs. Milk	Lbs. Fat
1924	278.00	8860	303.4
1925	260.00	8672	304.7
1926	294.16	8972	309.1
1927	290.76	9000	310.1
1928	266.51	9580	319.0

The results for the members were as follows:

Average No. Cows in the Association.....	266.51
Average per Cow—Pounds Milk.....	9580.
Lbs. Butter Fat .....	319.0
Percentage of Butterfat .....	3.3
Value of Product .....	\$286.25
Cost of Pasture .....	17.30
Cost of Roughage .....	30.75
Cost of Grain .....	54.86
Total Cost of Feed .....	102.74
Value of Product above Feed Cost .....	183.51
Return for \$1 Expended for Feed .....	2.30
Feed Cost per 100 lbs. Milk .....	1.07
Feed Cost per lb. Butter Fat .....	.32

Fifteen herds with an average of five or more cows exceeded an average production of 300 pounds of butterfat.

### Bucks County Cow Testing Association

The following is a report of the Bucks County Cow Testing Association for the month of March.

#### Group 1—Clarence R. Daniels, Tester

Owner	Name of Cow	Breed	Lbs. Milk	% Fat	Lbs. Butter
E. J. Ivins .....	Pauline	R. H.	1860	4.4	81.8
Arthur Shew .....	No. 9	G. G.	1869	3.9	72.9
L. Satterthwaite .....	No. 55	Gr. H.	1866	3.5	70.9
Joseph Canby .....	*Neva	R. H.	2263	3.1	70.2
Joseph Canby .....	*Shrimp	Gr. H.	2387	2.9	69.2
Newlin Hoagland .....	*Bess	Gr. H.	1628	4.2	68.4
Ralph Powell .....	*Bess	Gr. H.	2276	3.0	68.3
Joseph Canby .....	*Beauty	R. H.	1693	3.8	64.3
F. M. Garver .....	*Cherry	G. G.	1324	4.7	62.2
Joseph Briggs .....	*Rikka	R. G.	1336	4.6	61.5

Herds tested—23. Cows in milk—365. Cows dry—56.

No. Cows producing over 40 lbs. fat—49. Over 50 lbs.—31.

No. Cows producing over 1000 lbs. milk—37.

No. Cows producing over 1200 lbs. milk—51.

## Modern Methods in Cooling Milk on the Farm

How many dairymen actually know whether they are cooling their milk sufficiently, after every milking? Proper cooling means the reduction of the animal heat in the milk to avoid souring and the maintenance of the flavor. Clean milk, promptly cooled protects the flavor and prevents souring. This means a better monetary return for your product.

Science has shown us that cow milk, promptly cooled to a temperature of 60 degrees Fahrenheit, immediately after milking, and the temperature kept low until it arrives at the cooling station or to any other point of delivery, will prevent the milk from souring. The lack of this proper care of the milk product has cost many farmers heavy losses during the warm weather season.

Proper cooling prevents the growth of the bacteria in milk which promotes souring. It also prevents the growth of many off flavors, which frequently result in the rejection at the receiving station.

This is especially true in the case of morning's milk which must be cooled quickly to get it to its destination point promptly.

In order to effect the "proper" cooling of milk dairymen are rapidly turning to a more positive method of cooling their milk. There are a number of types of coolers that have been designed for this purpose on the market that are applicable for farm use.

In all of these methods the temperature of the cooling water is the important factor. If your cooling water is low in temperature, say 50 to 55 degrees Fahrenheit the more simple appliances can be used.

If the water is not cool enough to bring the milk down to the desired temperature, ice or some cooling mixture, such as the usual brine mixture may be used.

The general practice in cooling milk is to pass the milk over some container which holds the cold water or cooling mixture used to lower the temperature of the milk. Usually metal containers are used which allow for the easy passing of the cooler temperature through the surface of the container over which the milk is passing in a thin stream.

The simplest type of these farm coolers is one of a conical shape—which holds a large amount of cool water. This method, to prove satisfactory, is so constructed as to permit of a constant agitation of the water, usually by means of a stirrer, so that cold water always presents itself to the flowing volume of milk on the outside of the container.

Milk thus cooled can be kept at a low temperature by immersion in a tank of cool water and under ordinary conditions, remains sweet.

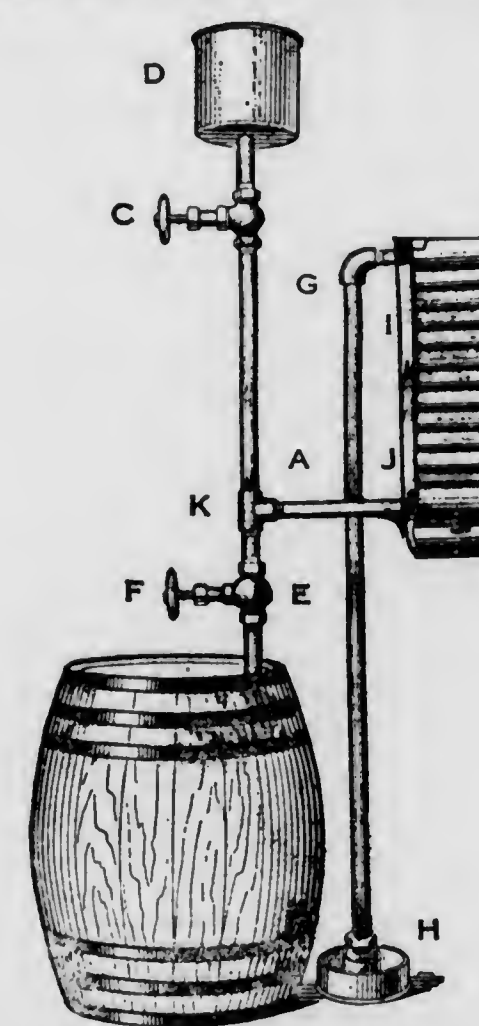
Coolers of this type have been used extensively. They can be readily moved, but from the standpoint of construction were not as durable as the more modern corrugated and tubular types of today. Corrugated and tubular coolers are now becoming more generally used. These coolers are usually well constructed and with proper care, will generally last a life time. Through coolers of this type water can be moved rapidly, insuring a cool surface over which the milk can flow at all times.

In many cases they are constructed so as to withstand the pressure of water

forced through them, either by gravity or by low pressure pumps.

This type of cooler is said to be more economical, in the long run than are the older styles. They can be used satisfactorily with an ordinary flow of water, provided its temperature is low enough, or can be operated by pumps forcing iced water or any ordinary freezing mixture through them. Most of these coolers are built heavily enough to withstand that pressure. Some of these coolers are so constructed that the cold water may be used in the top of the cooler and iced water or a freezing mixture in the lower half of the cooler. When this is done it is possible to circulate the brine or ice water over and over, recharging with ice in a barrel or in special brine makers. The only objection to one of these high grade tubular coolers is that they are somewhat expensive. That is, being constructed of copper and bronze and designed for pressure, their first cost is higher than many dairymen feel they are justified to spend for such equipment. In spite of this thousands are in use today, because actually permanent coolers of this sort are a saving in the end.

Recently, there has appeared on the market a special type of pressure tubular cooler which, due to the design is being sold at prices well within the



The Siphon System

range of every dairyman. These coolers are adapted for all the methods of circulation now employed with the Tubular coolers and offer all the advantages of such coolers for farm purposes.

It is possible now to equip the dairy with a pressure cooler and, if necessary, a pump for circulating, where no water is available. These pumps are either belt or electric motor-driven. The motors are supplied for farm circuit voltage. If it is desired to use the pump only for the ice water or brine you can now obtain complete outfits for making brine, pumping through coolers and returning to tank to be recharged and circulated again.

If no power of any kind is available there are several ways of enjoying the advantages of forced circulation with a tubular cooler. By arranging two barrels, one at a higher level than the other,

(Continued on page 11)







## EARLY PASTURE IS A STIMULANT

BUT IT'S NOT A SQUARE MEAL



THE United States Department of Agriculture, in a recent bulletin, sets forth some facts on pasture feeding worth the attention of every practical dairyman. The bulletin says in part:

"ONE of the hardest-working animals on the farm is the high-producing dairy cow. If she produces as much as 35 pounds of milk a day she can ordinarily not eat and digest enough grass to furnish all the nutrients for her requirements. A cow producing only 20 or 25 pounds per day will scarcely be able to get sufficient nutrients out of the good pasture grass which she can eat to keep up this amount of production. Yet thousands of farmers expect their dairy cows to produce more than this during the summer on poor pastures with no additional feed.

"Early spring grass is watery and immature and may contain less than 10 pounds of dry matter per 100 pounds of grass. This is a smaller quantity of dry matter than is contained in 100 pounds of milk. A cow producing 35 pounds of milk per day must gather and eat about 275 to 300 pounds of early spring grass to get enough feed for her requirements. It would be practically impossible for her to do this on the very best of pasture.

"... In addition to good pasture, cows producing more than 20 pounds of milk daily should be given 1 pound of grain to each 4 to 6 pounds of milk produced."

### On Pasture Feed AMCO 20% DAIRY

AMCO 20% DAIRY supplies all the additional energy, nutrients, and minerals that your cows need, at a price that makes grain feeding on pasture no hardship. Feed your 35 pound cows 5-6 lbs. of AMCO 20% DAIRY daily, and your 50 pound cows 8 lbs. of AMCO 20% DAIRY.

See your Authorized Amco Agent today.

# AMCO

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DIVISION OFFICE: MUNCY, PA.



### Fashions Changed For Refreshments

Fashions in refreshments have changed, said Lucile Brewer, a member of the staff of the college of home economics, speaking before four hundred housewives who gathered about her tea table at Farm and Home Week at Cornell University. While members of her classes in cookery brought forth brown and white sandwiches, paper thin, and frosted cakes and decorated cookies.

Refreshments must be simple and light, she said. Gone are the days of elaborate concoctions to plague the dyspeptic, to burden the light-spirited, and to bring nightmares to the unwary. The considerate hostess does not spoil her guests' dinner after an afternoon of bridge; nor disturb their night slumbers by the indigestibility of her evenings' refreshments. "Ice cream and cake are sufficient for evening, but if more filling food is desired a salad and sandwiches may be substituted, but both salad and ice are unnecessary."

Wafers, small sandwiches, or little cakes served with a beverage are delightful and sufficient refreshment for any occasion.

### Use More Cocoa

Miss Brewer urges greater use of cocoa as a refreshment drink because it adds milk to the diet. "The reason that so much bad cocoa is served is that it is poorly made. Cocoa must be well cooked and the ingredients combined hot."

Miss Brewer looks forward to the return to favor of the well-made loaf cake of plain white, yellow, or chocolate mixture. "Of course, it must be a very well-made cake. Little cakes may be less perfect but a large cake must score higher as to texture, grain, and crumb because its faults are more apparent. There is nothing more attractive than slices of a perfect cake and it also takes less time to make, with fewer dishes to wash."

Ribbon sandwiches made of slices of buttered white and Boston brown bread pressed together and sliced into narrow strips were admired, as were the "open faced" sandwiches, spread with seasoned butter and decorated with sifted, hard-cooked eggs, sliced stuffed olives and tiny little sprigs of parsley.

### Double-Decker Rolls

Double-decker rolls made of a quick yeast dough, rolled thin, lightly buttered, and two rounds baked together in a muffin tin are ideal. To butter, the top round can be lifted off without destroying the "figure" of the roll. Cheese biscuits made of an ordinary baking powder dough to which sifted cheese has been added lightly are delightful with hot tea. These thin, and when served hot need not be buttered.

A good furniture polish is made of equal parts of vinegar, turpentine, and boiled linseed oil mixed thoroughly.

### Philadelphia Housewives Attend Cooking School

That Philadelphia housewives are very much interested in learning new and better methods of cooking was shown most conclusively the week of April 16th, when they turned out in crowds for Miss DeBoth's Cooking School, at the Academy of Music.

The Philadelphia Public Ledger felt that a big newspaper loses a desirable, close personal contact with its readers because of its size. To counteract this loss they opened a cooking school of four sessions, with Miss Jessie DeBoth, as lecturer and invited the housewives of Philadelphia to attend.

They accepted this invitation and 12,500 persons attended the school. The police report that approximately 15,000 were turned away, and at the Tuesday afternoon session, April 17th, in the rain, more than 2,500 women stood in line waiting for a seat after the hall was filled to its capacity of about 3100.

The management of the Academy tell us that only upon two previous occasions have their crowds equaled this one in size. These were a Pavlova performance and a convention at which William Jennings Bryan was the speaker.

Would you like to try some of these biscuits Miss DeBoth demonstrated?

### Butter-Scotch Rolls

Line a layer cake pan with a paste made by creaming one cup brown sugar and 1/3 cup of shortening.

Roll baking power biscuit dough to a quarter inch thickness. Sprinkle the following on top: 1 cup sugar, 2 tablespoons flour, 1 teaspoon cinnamon, 1/2 cup raisins. Roll as for jelly roll. Cut about 1/2 inch thick; place in pan with cut side down. Be sure to fill pan only half full so that syrup does not overflow. Bake in hot oven till done, about 15 or 20 minutes.

### It Pays to Look Over the Human Machine

The life of machinery depends on keeping all the spare parts in repair. You know that it pays to tighten a bolt when it first loosens and to oil the bearings even before there is any friction.

This same principle of overlooking and overhauling applies to the human machine—your body. Go to a doctor and have yourself looked over. Repairing the little defects that he may find will keep your body in good running order. A health examination may add years to your life.

Many large industries give physical examinations not only to new men but also follow this up with a yearly examination of all employees. Such examinations are a money-saving as well as a life-saving measure for both the working man and the company for which he works.

If you regularly inspect your washing machine, a vacuum cleaner or electric pump why not place an equal value on your own health?

## PROTECT YOUR HERD WITH A VISIBLE DUPLEX MILKER

No Other Milker Has All  
--These Advantages--

### Automatic Control of Suction

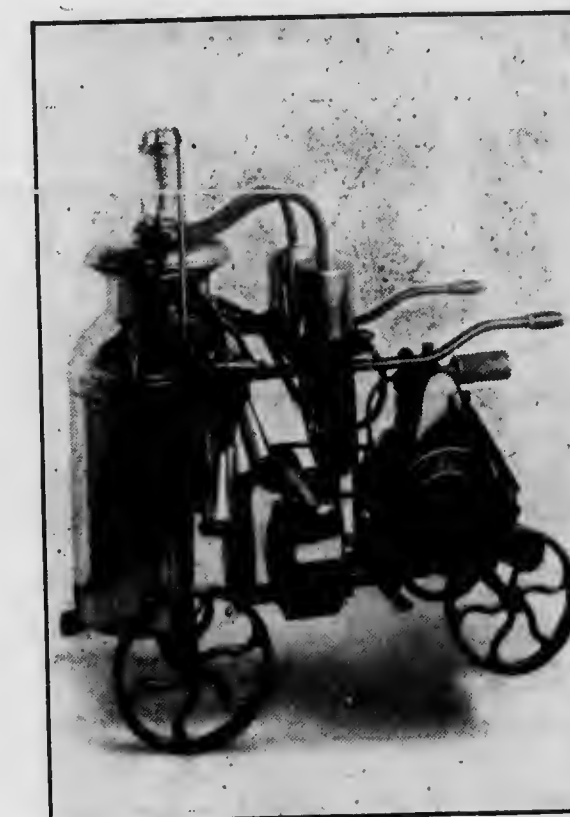
When the milk flow from either cow stops—SUCTION STOPS on that cow AUTOMATICALLY.

### Suction Adjustment for Each Cow

No over-milking of the easy milkers—no changing your herd around—just the right amount of suction for each cow obtained INSTANTLY.

### Milk Flow Separately, Visible

Each cow's milk is plainly seen as it enters a glass chamber before passing into a covered ORDINARY SHIPPING CAN.



### Gas Engine or Electric Power

SIMPLE—a woman or 12 year old child can operate it.

SANITARY—only one line of hose to claw and from claw to each cup. Can be cleaned thoroughly in 10 minutes.

EFFICIENT—combines suction and squeeze action the calf way.

PORTABLE—no installation—and no pipe lines.

ECONOMICAL OPERATION—uses 1/4 HP motor or 1/2 HP engine.

### Avoids These

INSTALLATION EXPENSE.

PIPE LINES.

GUESS WORK.

OVER-MILKING easy milkers.

CONSTANT SUCTION to hold teat cups on.

CONTINUED SUCTION on an exhausted udder if left on after milk flow stops.

REARRANGING of herds to get hard milkers in "pairs" and easy milkers in "pairs".

HOLDING OF HEAT in an air tight pail—DUPLEX milks into an ordinary milk can with ventilated cover.

LOSS OF TIME AND USELESS LABOR THROUGH HAND MILKING.

The average adult user of a DUPLEX can milk 16 to 20 cows per hour at an expense of not over 4c per hour to run the machine.

## PAY AS IT EARNS ITS WAY

### Practical

Milks two cows at once, but with separate pump—separate suction adjustment—separate visible milk chamber—separate automatic cut-off suction when milk flow stops.

### Guaranteed

Built of the best material obtainable. Ball bearing worm drive power transmission. Aluminum cylinder pumps. Any defective parts replaced FREE for five years.

### Proven

Thousands of earlier and present models have been sold during past EIGHT YEARS.

## SPECIAL OFFER NOW

To only one actual Dairyman in each community to introduce this simplest, latest and best development in milking machines.

Send in coupon today. Don't wait. A two cent stamp may mean hundreds of dollars to you, but you must be an actual milk producer.

This offer is for just ONE producer in a neighborhood. You will be glad if you are that one.

SEND COUPON TODAY

### COUPON

Bath Mfg. and Sales Corporation, Bath, N. Y.

Please send me (without cost or obligation), your circular "What Users Say," and your SPECIAL OFFER which I agree to consider confidential.

Name.....

Address.....

State.....

R. F. D. No..... No. Cows Milked.....



# Cool your Milk

this new and better

**Way.** Cool it quickly to below 50 degrees and KEEP IT

**COOL.** Do this if you want top prices . . . and if you want to supply milk that is clean, wholesome and low in bacterial count.

The ESCO Milk Cooling Cabinet is designed exclusively for cooling and storing milk on the dairy farm. Operated by electric refrigeration . . . controlled automatically, maintaining a uniformly low temperature. Cans of milk placed in the ice cold water of an ESCO Cabinet are cooled quickly and kept at a temperature below 50 degrees.

It is the easiest method—clean, trouble-free and inexpensive. Exactly what you have been seeking.



**ELECTRIC MILK COOLING CABINET**

Some territory still open for distributors and dealers

Built in 4, 6, 8, 10, 12 and 14-can capacities. Insulated with 3" cork on all sides. Refrigerating coils encircle interior.



Free Circular tells all about it!

Send for it Now!

Send for complete information  
ESCO Cabinet Co., West Chester, Pa.  
Please send me full information concerning the ESCO Milk Cooling System for dairies.  
Name \_\_\_\_\_ Address \_\_\_\_\_  
Town \_\_\_\_\_ State \_\_\_\_\_  
I make \_\_\_\_\_ cans of milk  
per day (2 milkings)

## Cooperation Rests on Marketing Efficiency

The "ballyhoo" days of agricultural cooperation have passed. No longer is the "sign 'em up" campaign the chief aim of farmer business organization. Agricultural cooperation today, says Chris L. Christensen, of the United States Department of Agriculture, is emphasizing better marketing services and increased business efficiency.

Three distinct phases of agricultural cooperation since 1905 are cited by Mr. Christensen, who is in charge of the Division of Cooperative Marketing in the Bureau of Agricultural Economics. In the 15 years from 1905 to 1920, he says, large gains were made in the number of farmers' elevators, livestock shipping associations, cooperative creameries, fruit-packing associations, fluid-milk organizations, and the like. These were typically local in nature and relatively small in annual turnover. They were designed to perform the first stages of the marketing process.

From 1918 to 1925 the formation of large-scale marketing organizations was a striking feature of cooperative development. Some of these attempted the performance of more advanced stages of the marketing process, even going into terminal market operations. These attempted regional pools, large in volume and in the area covered. Still others sought to improve marketing services and promote payment of differentials for quality, standardization of reliable products, and study of and response to consumer preferences. A feature of this growth was the prevalence of "iron-clad" and long-term contracts providing heavy penalties for selling outside the pool. Some of these organizations have failed, others have modified their practices.

"Members of present-day organizations," Mr. Christensen says, "are being selected rather than merely signed up wholesale. Membership contracts are be-

ing modified to meet the financial and other economic conditions of the grower. Notions of arbitrary price fixing by cooperative organizations have been abandoned in favor of efficient business practices. Cooperative managers, directors, and leading growers, instead of merely admiring the beauties of cooperation, are thinking of its problems—financing, selling, management, better grading and standardization, and getting a product of uniform quality to market. They are thinking of ways cooperative business can be made efficient and are giving attention to better balanced production programs. The associations are growing in experience, in financial strength, and in the confidence of their members. Generally, they are getting on a better business basis."

Sand or stones that have clay or dirt mixed with them will not make good concrete.

## Vocational School at Unionville Uses Dairy Council Pageant

One of the finest presentations yet given of the "Masque of Beauty Through the Ages" was that made by the students of the Unionville Joint Consolidated High School, Unionville, Chester County, Pennsylvania on April 11th, 12th, 13th.

This school staged the Dairy Council pageant with the same degree of success which has attended its use during the past two years in large city high schools.

The preparation for the pageant, which traces man's search for health through early periods of history down to the present, has covered many months. The costumes were largely made by girls in the sewing classes while the scenery was constructed by boys in the carpentry groups. Two of the episodes were staged in Harrisburg on Vocational Night during the January Farm Products Show. Since that time all of the various departments in the school have united in the development of the project.

"The Masque of Beauty Through the Ages" attracted a wide amount of interest. The audience for the three successive nights taxed the capacity of the auditorium.

A thirty-two page program containing a synopsis of the pageant and its cast was made possible by the advertising of local merchants and dealers.

The success of this undertaking which involved the co-operation of the members of the school body and faculty, together with the support it received from the local community, is one of the demonstrations of the splendid progress which vocational education is making in Pennsylvania.

## Farm Labor Supply Larger Than Year Ago; Wages Unchanged

A farm labor supply slightly larger than at this time a year ago, but with farm wages at about the same level, is reported by the Bureau of Agricultural Economics, United States Department of Agriculture.

The increased farm labor supply, says the report, is probably due to the lower volume of industrial employment, while relatively high industrial wages have apparently acted to maintain farm wages at about the same level as last spring.

The general level of farm wages on April 1 is reported at 166 per cent of pre-war, or 5 points above January 1928, and the same as on April 1 last year. The rise since January is largely seasonal and reflects the demand for farm labor at the beginning of the crop season.

The demand for farm hands is about the same as at this time last year, but the supply of farm labor has increased approximately 4 per cent. The level of farm wages is also considerably higher than the level of farm prices received by producers which on March 15 was 137 per cent of pre-war.

All geographic divisions reported increases in monthly wages over January except in the South Atlantic States where there is a large increase in the supply of farm labor.

## Keep Accounts Straight

Field work is now starting and it is a busy season. Do not fail to take a few minutes a day to keep the account book up to date. If it is put off you will never catch up.

## American Institute of Cooperation

The University of California, at Berkeley in that state will house the American Institute of Cooperation during the coming July.

The program involves three distinct phases: First, a field trip occupying one week, beginning July 9th, during which various cooperation organizations will be visited; second, a two week's cooperative trade conference at the University of California, at Berkeley, beginning July 16th and ending July 28th, and third, a number of courses dealing with the principles of cooperation and cooperative business practices, which will be offered at the University of California for a period of four weeks, beginning July 9th and ending August 4th, 1928.

About 60 percent of this year's program will be devoted to problems of Pacific Coast Cooperation and 40 per cent to problems of cooperatives in other parts of the United States. The program committee has so arranged the courses that the morning sessions of the Institute will be devoted to the larger questions and issues in which the co-operatives of the United States have a common interest.

Afternoon sessions will continue the discussion of these larger problems in group conferences which will also take up specific problems affecting particular commodities.

## Cooperative Pilgrimage

One of the features of the 1928 session of the Institute will be a pilgrimage to the birthplace of modern cooperation. It was in Southern California, among the citrus fruit growers that the modern idea of cooperative marketing was born.

Through groves and orchards, assembling plants and through general headquarters, the eastern pilgrims will be conducted, and every detail of the handling of the principal California products of orchards and fields will be explained by experts.

Tour of the Pacific Northwest  
Following the general sessions of the Institute a personally conducted tour covering the important cooperatives in Oregon, Washington State and Idaho has been planned.

For detailed information regarding the entire program of the Institute and the many interesting trips, communicate directly with Charles W. Holman, Secretary, 1731 Eye St., N. W., Washington, D. C.

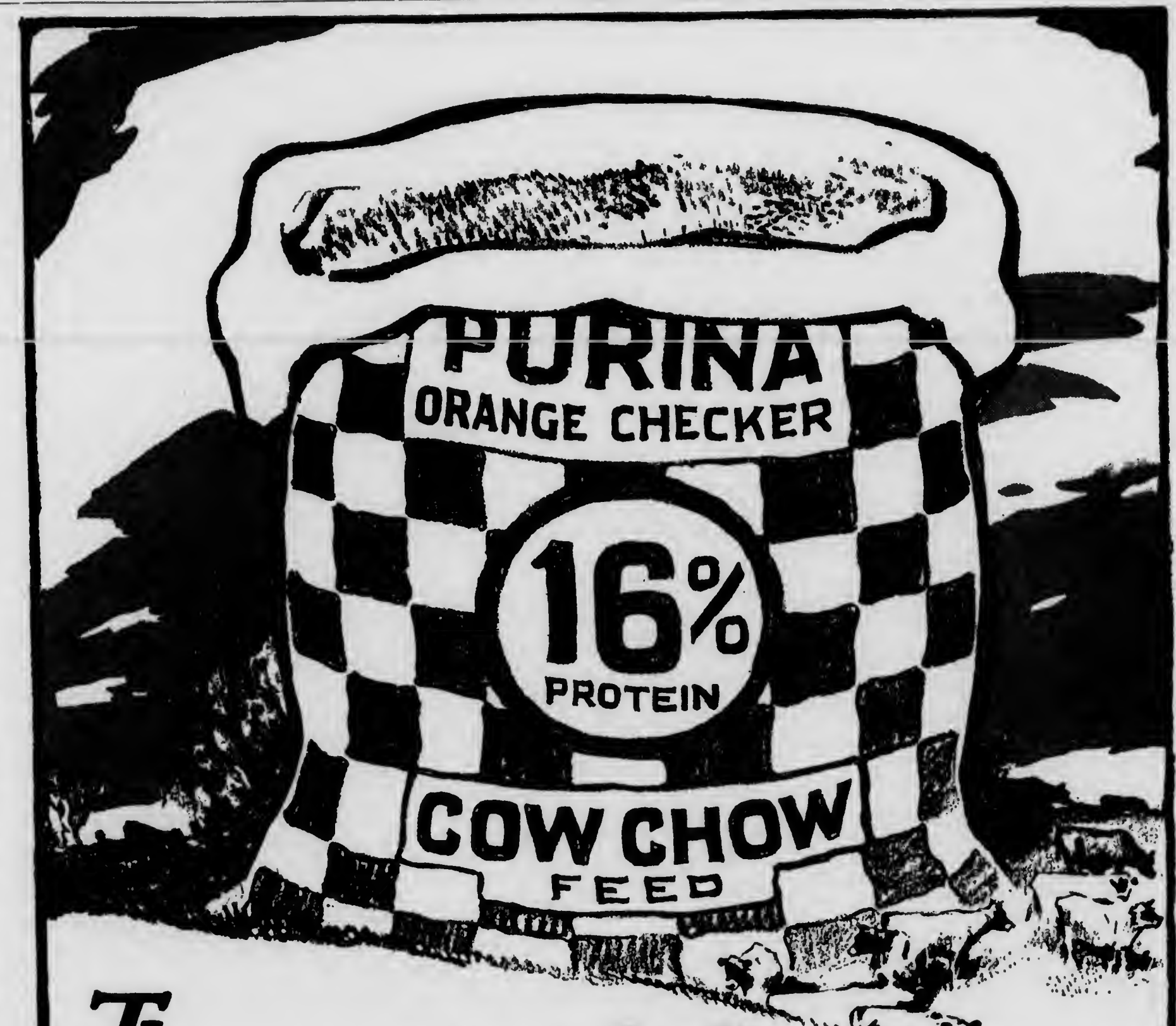
## Report of the Quality Control Department, Philadelphia Inter-State Dairy Council.

The following is a report of the work done by the Quality Control Department of the Dairy Council, for the month of March, 1928.

No. Inspections Made... 2,994  
No. Sediment Test .... 962  
No. Meetings Held .... 6  
Attendance ..... 682  
No. Man Days, Fairs and Exhibits ..... 3  
No. Miles Traveled ...19,178

During the month 98 dairies were discontinued from selling for failure to comply with the regulations—27 of which were reinstated before the month was up.

To date 97,145 farm inspections have been made.



# The greatest help your pasture ever had

**NOW** you can get Orange Checker Cow Chow—the complete supplement to fresh spring grass. It's good old Cow Chow quality and ready to feed just as you buy it.

Feed Orange Checker while grass is new and green. Go back to your Green Checker Cow Chow when your pasture starts to dry.

The checkerboard feed dealer is selling Orange Checker Cow Chow at an attractive price. See him!

PURINA MILLS, 854 Gratiot Street, St. Louis, Mo.  
Eight Busy Mills Located for Service

Write us for a Purina Cow Booklet—free

## PURINA CHOWS

24% PROTEIN COW CHOW  
20% PROTEIN COW CHOW  
CALF CHOW BULKY-LAS PIG CHOW HOG CHOW



## 100-Real Dairy Cows-100 On Hand at All Times



Tuberculin tested. Guernseys, Jerseys and Holsteins from accredited herds. Priced to sell. Carload lots a specialty.

**JACOB ZLOTKIN**  
Phone 530, FREEHOLD, N. J.  
"The Man Who Sells Good Cows"

## Philadelphia Inter-State Dairy Council General Offices

219 N. Broad St., Philadelphia

A cooperative movement established for the dissemination of information and publicity pertaining to the production and distribution of dairy products and their food value in nutrition.

Affiliated with the National Dairy Council Officers  
Dr. Clyde L. King, Chairman  
H. D. Allabach, Vice Chairman  
R. W. Balderson, Executive Secretary  
R. J. Harrison, Jr., Treasurer

## High Grade Dairy Cows

in HIGHTSTOWN, N. J.

We handle all kinds of cattle

Holsteins — Guernseys — Jerseys  
A Specialty

All cows tuberculin tested and sold subject to a 60 or 90 day retest and fully guaranteed in every respect.

Free delivery any distance.

**B. ZAITZ & SON**  
202 Mercer Street  
Phone 72 Hightstown, N. J.



↓

**Cream Separator**  
**NEWS**  
**McCormick-Deering**  
**BALL-BEARING SEPARATORS**  
**Re-Designed**  
**Improved**

Four Ball Bearings Instead of Two  
Japanned Finish  
New Bowl Design  
Increased Capacity  
Positive Automatic Lubrication  
Glass Window for Oil Gauge  
New Revolving Supply Can  
Perfect Outside Faucet  
New Frame, New Gear Design  
New Rounded-Edge Tinware  
Sturdier Construction

THE New McCormick-Deering ball-bearing separator is another step forward in the progress of the dairy industry. This machine, built in sizes ranging from 350 to 1500 pounds per hour, is not merely a new model but a distinctly new type. Do not fail to see it at the nearest dealer's.

### International Harvester Co.

of America

PHILADELPHIA HARRISBURG BALTIMORE

### First Annual Consignment Sale of the Chester County Guernsey Breeders' Association

to be held at

Sunny Ridge Farms, Chadds Ford Junction, Pa.

Thursday, May 31st, 1928; 12.15 P. M. Eastern Standard Time.

This sale will include:

20 cows in milk and close springers; 10 bred heifers; 13 open heifers; 7 bulls of serviceable age.

These cattle have been selected from the best herds in Chester County, and every animal sold will be healthy, free from tuberculosis, and negative to two or more blood tests for contagious abortion.

For Information and Catalogue, write

JAMES B. LINGLE,  
Chairman of Sales Committee,  
KENNETT SQUARE, PA.

TRADE  
MARK

# NICE

REG.  
U.S.A.

THE NAME TO GO BY—WHEN YOU GO TO BUY  
**PAINT AND VARNISHES**

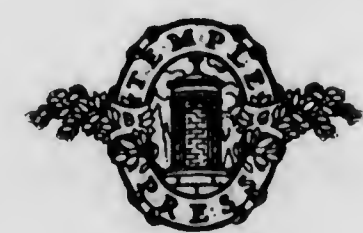
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EUGENE E. NICE COMPANY, Inc., PHILADELPHIA



**10 Day Test**  
Write today for descriptive literature and particulars of how Dr. Clark's PURITY Milk Strainers help you get Grade "A" test and more money for your milk.

It is the only Strainer made that's guaranteed to strain 100% clean. Our 10 Day Test enables you to prove it at our risk—your money back if it fails to remove ALL the dirt. Thousands in use—two sizes 10 qt. and 18 qt. Sold by dealers everywhere. (6) **PURITY STAMPING COMPANY** Battle Creek, Michigan

**Purity**  
MILK STRAINER



Let Us Design Your Stationery

**Horace F. Temple**

Printer

Bell Phone No. 1  
WEST CHESTER, PA.

### Cow Test, Like Charity, May Begin at Home

(Continued from page 1)

ing rod, just before it is loaded for shipment for if there is any milk spilled in loading or in handling over rough roads, the loss is generally from the top of the can, particularly if the can has been undisturbed over night.

Thefts of milk and cream are by no means uncommon. One Inter-State member had a hired man who helped himself to two quarts of milk, every night, for two years before he was discovered. He very thoughtfully filled up the cans with water to camouflage the transaction. (The removal of two quarts of 15% cream from the top of a 40 qt. can of 3.5% milk and replacing with water will reduce the butterfat content of that can of milk to 2.78%.)

Another member had a young colored hired man whose diet was apparently very deficient in vitamin A, and which he supplemented with cream from the employer's milk cans after business hours. Another member had a neighbor whom he found to be visiting his milk house regularly each week-end, not as did Demosthenes carrying a lighted lantern in broad daylight, but under cover of darkness and carrying a 4 quart can.

Removal of milk for family use from cans that have not been disturbed for sometime is a task that requires some precautionary skill. When Bill Jones was asked about that possible source of loss, he chuckled with glee. "You can't hang that one on me," he said, "The Missus always sends the hired girl or one of the children to get the milk for the house."

Right there Bill convicted himself. Mrs. Jones certainly should be permitted to have all the milk and cream she wants for household use and the daughter is entitled to all she wants for cooking lessons and week-end parties; Bill, himself, is no piker when it comes to using the "lactal fluid" on his oatmeal, but he should make it his job to get the milk himself, for the household, direct from the cooler to guard against someone less experienced taking the cream from the milk that is to be sold on a butterfat basis.

The freezing of milk in winter and partial churning in summer cause greater losses in test than most dairymen realize. It is practically impossible to get a representative sample from milk that is partly frozen.

In a recent check up, the Field and Test Department of the Inter-State Milk Producers' Association found that the

average test of the milk from a number of dairies, on days when it was frozen was 3.88% butterfat and 4.00% from the same dairies on the days when it was not frozen. In addition to the loss in test it is practically impossible to correctly weigh milk at various frozen stages. The accumulation of slush in the weigh tank will be influenced by every can of milk that is emptied. It is impossible to calculate the constantly changing quantity.

Just as freezing in winter affects tests adversely, churning in summer causes even greater losses. When milk that has not been sufficiently cooled before shipping has been hauled long distances over rough roads, the constant agitation causes the churning of the cream into small particles of butter. Naturally when sampled the butter particles do not get into the sample and low tests result. The milk weigher and sampler generally does not notice this condition.

The parchment papers, already mentioned will help prevent both freezing and churning. In winter time their use will keep a thick layer of cream from freezing to the can lids and in summer their use will seal the air spaces in the necks of the milk cans which if left open permit agitation enough to cause small particles of butter to form.

The first essential preventative against churning and the most important one is to have the milk as cold as possible. (55° F. or lower). Thoroughly stirring just before shipping will also aid to prevent losses in test from either freezing or churning.

Therefore our advice to our friend William Jones, and to all others whose tests are not as high as it is thought they should be, before you let yourselves get all "het up" and before your language shocks your family and makes your hired man blush, it would be well to check up on all possible sources of loss which may occur before your responsibility as a producer ends, and the responsibility of your milk buyer begins.

(1) See that your can lids fit tightly.

(2) Use parchment papers every day in the year.

(3) Lock the milk room door.

(4) Be careful in removing milk for the house.

(5) Cool and stir the milk thoroughly before shipping.

In most cases, to borrow a quotation from a paint manufacturer, you will find that, "If you save the surface you save all."

### Montgomery County

A program announcing the events of the Second Annual Field Day of the Montgomery County Jersey Cattle Club to be held on Many Springs Farm, May 30th, 1928, New Centreville, Montgomery Co., Penna.

8.30 A. M. Standard Time.

Cattle Judging Contest—in which prizes will be presented—open to Boys and Girls under 18 years of age. Mr. Edward A. Stanford, President of the Montgomery County Dairy Institute, will judge and explain the various points.

10.30 A. M., Standard Time.

Tour of Stables. Many Springs Herd consists of 145 head of Island Bred cattle. Don't miss this.

11.30 A. M., Standard Time. Lunch.

Bring Basket Lunch. (Many Springs Farms will furnish milk).

### Jersey Cattle Club

12.30 P. M., Standard Time.

Demonstrating the idea of line breeding. Mr. J. M. Anderson, owner of this famous herd will explain in detail the "Why and Wherefore" of this problem.

1.45 P. M. Standard Time.

Awarding of prizes.

2.00 P. M., Standard Time.

H. D. Allebach, president of the Inter-State Milk Producers' Association, will make a talk on "Marketing of Dairy Products."

2.15 P. M., Standard Time.

Five minute talks by: L. W. Morley, Secty. American Jersey Cattle Club.

Dr. H. O. Neuhaus, Bureau of Animal Industry, Harrisburg, Pa.

Robt. Eno, Field Man, American Jersey Cattle Club.

R. G. Walte, Montgomery County Farm Agent.

### Modern Methods in Cooling Milk on the Farm

(Continued from page 8)

you can, with a hand pump, fashion a method of returning the ice water to the barrel by pump and then permitting gravity to flood the cooler and return the water to the pump from the lower barrel. A few strokes on the pump, after having emptied a pail of milk into the cooler, is all that is necessary to keep the circulation continuous. These hand pumps are not costly, and are sold by many dairy supply houses.

Another method is to siphon the cool-



Showing Brine Making Connections with Double Waterway Tubular Cooler

ing medium through the cooler. This is accomplished by special piping, a barrel and a siphon fitting. To start the circulation the valves must be manipulated in order to prime the piping, much as a suction pump is primed. Once started, circulation continues as long as there is water in the barrel.

All these methods have proven satisfactory and are a big improvement over the old fashioned methods of cooling milk. They are relatively inexpensive and are operated at small cost.



Just setting a can of milk in water does not always cool it.

The prevented losses from sour milk will quickly pay for an Oriole Cooler.

Specifications					
Capacity	Ht.	Cooler	Length	Shipping	Capacity
Size	Gals.	Hr. Reservoir	Overall	Weight	Reservoir
A	35	33"	21 1/2"	70 lbs.	10 gal.
B	50	33"	31 1/2"	85 lbs.	10 gal.
Use size A for 3 milkers.					
Use size B for 5 milkers.					

Use size A for 3 milkers.

Use size B for 5 milkers.

Guaranteed in Every Respect  
The Oriole is guaranteed without restriction against imperfect workmanship or materials. Every cooler is further guaranteed to withstand without leakage a pressure of 75 pounds to the square inch. If you have been a user of other circulating coolers you will appreciate this guarantee.

CHERRY BASSETT CO., 2324 Market St., Phila., or Russell and Ostend Sts., Baltimore

## NOW You Can Afford a Real Tubular, High Pressure Milk Cooler

At last you can purchase a cooler of the highest efficiency and durability with considerably less money than ever before possible. The Oriole Cooler deals a smashing blow to the high cost of genuine tubular coolers for the dairy farm. Every dairyman can now afford a cooler of this type—the Oriole.

Due to unique methods of manufacture we finally have the ideal cooler the dairy industry has been waiting for—a cooler with Rolls Royce durability that sells at Ford prices! There will be no excuse now for milk losses resulting from improper cooling.

**Tubular Coolers Endorsed as Most Efficient**  
Quality control associations, inspectors, health officials, agricultural colleges, all authorities agree that the tubular type of milk cooler, which employs cold water circulating under pressure through the tubes, while the milk flows down over the outside, is the most efficient and desirable kind of cooler for the dairy. The Oriole is endorsed by such authorities everywhere. It is the type of cooler most easily kept clean and sanitary and is genuinely tubular.

**Make Your Last Cooler Purchase Now**  
Once you have an Oriole there will be no necessity to ever replace it, for it is built of copper and bronze throughout—overlasting metals. Nothing can rust out; nothing can wear out and the workmanship employed in making this cooler is absolutely unsurpassed.

**Which Size Should You Buy?**  
Oriole coolers are made in two sizes. Size A cools 35 gallons of milk an hour and size B cools 50 gallons an hour. Both sizes consist of 1 1/2" diameter seamless copper tubes spaced so that cleaning between them is easy. A lip, formed into the tubes when made, runs along their under side, providing a guide for the flow of milk from one tube to the next. The water flows through these V shaped flanges as well as the balance of the tube interior so that all possible cooling surface is utilized. This space is "dead metal" on other tubular or corrugated coolers.

Upper and lower troughs are removable without use of tools. Reservoir, troughs, and all other parts have only smooth round tinned surfaces—no square corners hard to keep clean.

**Inspection Free**  
Order an Oriole Cooler, unpack and set it up. Inspect it thoroughly. If the design, workmanship and quality does not meet your approval entirely pack the cooler up again and ship it back at our expense. Your money will be refunded without question. No offer could be fairer than this.

Remember our unlimited guarantee and this free inspection offer. You risk nothing. Order your Oriole today.

CHERRY BASSETT CO., 2324 Market St., Phila., or Russell and Ostend Sts., Baltimore

# Oriole Milk Cooler

HIGH PRESSURE NO LEAKS

## Willard

### Storage Battery and Service Station

Starting, lighting, ignition—storage batteries of every description, make and for every purpose are recharged, repaired and rebuilt here by skilled battery men working in a fully equipped and stocked shop.

OUR SERVICE is unbiased and dependable.

### Pusey & Young Storage Battery Station

West Chester, Pa. Coatesville, Pa.

### THE SCHOLL CO.

194 Frelinghuysen Ave., Newark, N. J.

DIRECT IMPORTERS  
**BEEF PULP—PEAT MOSS**  
Specialists in California and Eastern Alfalfa and Alfalfa Meal  
All kinds of Dairy Hay and Straw

Mention the Milk Producers' Review when Answering Advertisements

### BABY CHICKS

Order now for May delivery.

Rhode Island Red Chicks, \$15 per 100; Barred Rocks, \$15 per 100; White Leghorn Chicks, \$11 per 100. Ducks 50c each. 25 or more 25c each. Good straight stock, guaranteed delivery.

**Satterthwaite's Seed Store**  
16 N. WARREN STREET  
TRENTON, N. J.  
Phone 8278

## Dairy and Poultry Feeds

That Produce Results  
Farm Supplies of all kinds

Ask us for Prices

### Scheideler Bros.

LAWRENCE STA., N. J.

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## QUALITY CHICKS

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Good drainage apparently helps reduce winter killing with alfalfa, for in fields that have drains the stand usually is better over the drains.







# INTER-STATE MILK PRODUCERS' ASSOCIATION PHILADELPHIA PRICES in effect June 1st, 1928.

Subject to change whenever warranted by market conditions.

These quotations are based on 3% butterfat milk and a differential of 4 cents for each tenth point and 2 cents for each half tenth point up or down.

This price list is issued with the understanding that it is net to producers and that all buyers using it as a basis of payment to producers shall in addition thereto make the following contributions and payments.

(1) To the Philadelphia Inter-State Dairy Council 2¢ per hundred pounds (46½ quarts) of all milk bought from any producer at price listed hereon.

(2) To the Inter-State Milk Producers' Association 2¢ per hundred pounds (46½ quarts) of all milk bought from members of said association.

(3) To the Philadelphia Inter-State Dairy Council 2¢ per hundred pounds (46½ quarts) of all milk bought from other producers at price listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stabilization of markets and for an educational campaign advertising the food value of dairy products.

Basic price June first.				May surplus price.			
Test	Quantity	Price		Class 1		Class 2.	
per cent.	per 100#	qt.		Per 100#	Per qt.	Per 100#	Per qt.
3.	3.29	7.1	:	2.31	4.95	1.95	4.2
3.05	3.31	7.1	:	2.33	5.	1.97	4.25
3.1	3.33	7.15	:	2.35	5.05	1.99	4.3
3.15	3.35	7.2	:	2.37	5.1	2.01	4.3
3.2	3.37	7.25	:	2.39	5.15	2.03	4.35
3.25	3.39	7.3	:	2.41	5.2	2.05	4.4
3.3	3.41	7.35	:	2.43	5.2	2.07	4.45
3.35	3.43	7.4	:	2.45	5.25	2.09	4.5
3.4	3.45	7.4	:	2.47	5.3	2.11	4.55
3.45	3.47	7.45	:	2.49	5.35	2.13	4.6
3.5	3.49	7.5	:	2.51	5.4	2.15	4.6
3.55	3.51	7.55	:	2.53	5.45	2.17	4.65
3.6	3.53	7.6	:	2.55	5.5	2.19	4.7
3.65	3.55	7.65	:	2.57	5.5	2.21	4.75
3.7	3.57	7.65	:	2.59	5.55	2.23	4.8
3.75	3.59	7.7	:	2.61	5.6	2.25	4.85
3.8	3.61	7.75	:	2.63	5.65	2.27	4.9
3.85	3.63	7.8	:	2.65	5.7	2.29	4.9
3.9	3.65	7.85	:	2.67	5.75	2.31	4.95
3.95	3.67	7.9	:	2.69	5.8	2.33	5.
4.	3.69	7.95	:	2.71	5.8	2.35	5.05
4.05	3.71	8.	:	2.73	5.85	2.37	5.1
4.1	3.73	8.	:	2.75	5.9	2.39	5.15
4.15	3.75	8.05	:	2.77	5.95	2.41	5.2
4.2	3.77	8.1	:	2.79	6.	2.43	5.2
4.25	3.79	8.15	:	2.81	6.05	2.45	5.25
4.3	3.81	8.2	:	2.83	6.1	2.47	5.3
4.35	3.83	8.25	:	2.85	6.1	2.49	5.35
4.4	3.85	8.3	:	2.87	6.15	2.51	5.4
4.45	3.87	8.3	:	2.89	6.2	2.53	5.45
4.5	3.89	8.35	:	2.91	6.25	2.55	5.5
4.55	3.91	8.4	:	2.93	6.3	2.57	5.5
4.6	3.93	8.45	:	2.95	6.35	2.59	5.55
4.65	3.95	8.5	:	2.97	6.4	2.61	5.6
4.7	3.97	8.55	:	2.99	6.4	2.63	5.65
4.75	3.99	8.6	:	3.01	6.45	2.65	5.7
4.8	4.01	8.65	:	3.03	6.5	2.67	5.75
4.85	4.03	8.65	:	3.05	6.55	2.69	5.8
4.9	4.05	8.7	:	3.07	6.6	2.71	5.8
4.95	4.07	8.75	:	3.09	6.65	2.73	5.85
5.	4.09	8.8	:	3.11	6.7	2.75	5.9

By order of the Board of Directors

Tenth Floor, Flint Bldg.,  
Philadelphia, Pa.  
Issued Mar. 28th, 1928.

*W. D. Aldrich* President.  
*Robert W. Ballerstein* Secretary.

# Milk Production

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARM

Volume IX

West Chester, Pa., and Philadelphia, Pa., June, 1928

No. 2

## Third Annual Pilgrimage of the Dairy Industry, Washington, D. C.

A large group of those interested in the Dairy Industry attended the Third Annual Pilgrimage, held in Washington, D. C., May 8th and 9th, under the auspices of the American Dairy Federation.

The program included visits to the United States Bureau of Agricultural Economics, the Bureau of Dairy Industry, a group meeting with the Agricultural Committee of the United States Chamber of Commerce and a visit to the Experimental Farm of the Bureau of Dairying at Beltsville, Md.

The attendance at the various meetings numbered between 125 and 150 and through the various organizations and companies, represented a very large proportion of the dairy industry in the United States.

The first meeting was held in the Bureau of Agricultural Economics, where R. S. Dunlap, assistant secretary of

Roy C. Potts, Department of Agricultural Economics, made an address on the Dairy Economics Research work which the Bureau was conducting. Mr. Potts' remarks were based on the following points:

Geography of the Dairy Industry.  
Geography of Consumption.  
Production Studies.  
Consumption and Utilization Studies.  
Price Studies, Manufacturing, Transportation and Storage Studies.  
Distribution, Foreign Competition and Demand.

Dairy Farm Organization and Management.  
Dairy Outlook Reports and Industry Cooperation, which is essential to successful and satisfactory economic research.

Dairy Marketing Information was discussed by Chris L. Christensen, of the Bureau of Agricultural Economics, Di-

## Sixth Annual Meeting, Pennsylvania State Dairy Exposition

Keen interest developed in the various events at the Sixth Annual Penn State Dairy Exposition, held under the auspices of the Penn State Chapter of the American Dairy Science Association at State College on May 4th and 5th. Both in the number of entrants in the various classes and in the character of the work done in the preparation of the exhibit, as well as the judging contests, this exhibit was fully up to the high average of those that have preceded it.

Several new features have been added to the events. A girls milking contest, open to co-ed students of the college. Prizes were awarded the following in this contest: First, Elizabeth Field, East Falls! Second, Caroline Echles, Clarks Summit; Third, Margery Weyhenmeyer, Mountain Top; Fourth, Lela Welsh, Orangeville; Fifth, Sara Worthington, Warrington.

Montrose; Second, P. E. Strickler, Smock. Butter Judging: First, A. R. Simkins, Corsica. Cheese Judging, K. Kennedy, Volant; Second, C. G. Sharpe, Laceyville. Ice Cream Judging: H. H. Walker, Gambier; Second, A. R. Simkins, Corsica. All Products: First, A. R. Simkins, A. F. Davis, Elizabeth Field and C. G. Sharpe.

In the Dairy Cattle Judging Contest, the following winners were announced. Holstein Cattle: First, E. M. Cairns, Legonier; Second, C. S. Jackson, Coatesville. Guernsey Cattle, First, H. Poorbaugh, York; Second, J. A. Bailey, Oxford. Jersey Cattle, First, J. T. Albertson, Light Street; Second, A. G. Campbell, West Sunbury. Ayrshire Cattle: J. C. Andrews, Deer Lick. Sweepstakes, Amateurs: First, L. C. Dayton, South Montrose; Second R. F. Mollenauer, Eighty-four.



Group of Representatives of the Dairy Industry Attending Third Annual Pilgrimage Held in Washington, D. C.

Agriculture made a brief welcoming address. He told the visitors that the Department of Agriculture was their department and he hoped that both they and the department would gain much from their presence. "We know your problems," said Mr. Dunlap, "We are here to help you. If we can reduce the cost of your production it will be a big factor. Orderly production and orderly marketing should bring better returns to the farmer. Savings made at home are important factors in the success of agriculture."

Lloyd S. Tenny, Chief of the Bureau of Agricultural Economics then outlined briefly the functions of that Bureau. He outlined its crop estimating service, its milk, cheese and butter production service, cold storage statistics, dairy cow population statistics, wheat acreage reports, and many other features of the Bureau's work. Farm management, standardization of farm products, inspection service, and its market news service were other features touched upon.

"Marketing" Mr. Tenny said "begins with production, this together with orderly production are the important factors which make for success."

vision of Cooperative Marketing. "This Division," said Mr. Christensen, has to do with the organized activities of the farmer. All factors of buying and selling are considered. At the present time we have listed some 2500 farmers cooperatives; 1400 cooperative creameries, 750 cooperative cheese factories and 150 fluid milk associations. These aggregate \$640,000,000 worth of business annually. Production conditions as well as marketing conditions are rapidly changing, new marketing organizations and new methods are developing. Principles and practices of the cooperatives are studied. Marketing plans are considered, together with their relationship with the markets. Transportation methods and particularly the tank car system of transporting fluid milk and milk products are being given careful attention."

Mr. Christensen discussed the two major types of cooperative endeavor—the profit and non-profit systems; he pointed out that there was no definite plan for organizing any cooperative, but that it must be governed by marketing conditions and methods applicable in the territory or district in

Another new feature was that of making awards for prize essays. The subject was, "The Relation of Concrete on Dairy Farms to Clean Milk Production." Cash prizes were awarded in this contest by the Portland Cement Association. The winners were: First, M. A. Farrell; Second, Harry A. Troutman; Third, Simon R. Schneider; Fourth, A. G. Dank and Fifth, H. A. McCandless.

Clean Milk Production Contest prizes were awarded to: First, A. C. Hugg, Germania; Second, E. H. Phillips, State College; Third, R. C. Schneider; Fourth, K. L. Kennedy; Fifth, R. E. Carter, Meshoppen.

In the Dairy Products Judging Contest, the following winners were announced; Milk Judging: First, W. D. Johnson, Howard; Second, P. T. Brown, Philadelphia. Butter Judging: First, J. T. Albertson, Light Street; Second, P. T. Brown, Philadelphia. Cheese Judging: P. T. Brown. Ice Cream Judging: W. H. Johnson, Howard. All Dairy Products: First, F. M. Cornwell, Edinboro; Second, LaRue Evans, Montgomery; Third, P. T. Brown, Philadelphia.

In Group B of this contest, amateurs, the following awards were made. Milk Judging: First F. T. Bumell,

Professional Contest show the following awards. Holsteins: First, M. H. Berry, West Chester; Second C. M. Frozimer, St. Marys. Guernseys: First R. M. Smith, Pottstown; Second G. Danks, State College. Jerseys: First, C. D. Bower, Wellsboro; Second, J. D. Crossen, Montrose. Ayrshires: First R. M. Smith, Pottsgrove; Second, G. S. Hummer, Titusville. Sweepstakes: First, Gordon Danks, State College; Second, R. M. Smith, Pottsgrove.

Bacteriology Contest winners, First, R. A. Carter, Meshoppen; Second, F. M. Connell, Edinboro; Third, Ray Marshall, Formbell.

Dairy Cattle Fitting and Showing Contest. Class Champion and Breed Champion, Holsteins: First, A. G. Danks, State College. Second, C. W. Bowers, Wellsboro; Third, K. E. Storck, Troy; Fourth F. E. Robacker, Angels. Guernseys: First, W. W. Markle, West Newton; Second, H. L. Harvey, Chester; Breed Champion: W. M. Markle, West Newton.

Ayrshire Cattle, Champion and Breed Champion: First, I. B. Williams, Philadelphia; Second, G. W. Munson, Beaver. Breed Champion: G. W. Munson, Beaver.

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(Continued on page 6)



## The Relation of Concrete on Dairy Farms to Clean Milk\*

M. A. FARRELL, Penn State College

Milk more nearly approaches a perfect food than any other article in the diet. And since it is also a perfect food for the growth and development of many different kinds of bacteria, this fact is the real source of many of our dairy problems.

With the realization of the part that milk and its many products play in the diet of our nation, stringent methods are being taken by the producer and the distributor to produce a product which is clean and safe for human consumption. Many large companies are paying bonuses for milk of low bacterial count. In many districts, Boards of Health and Dairy Councils are requesting that certain sanitary measures be carried out on the farm in order to produce a clean and safe product. If the dairyman does not comply with these rules the individual is not allowed to sell his milk.

What is clean milk? A good definition is, "Clean milk is milk which reaches the consumer in practically the same condition which it leaves the udder of a healthy cow." That is, milk which is free from dirt or objectionable odors, which contains only a small number of bacteria, none of which are disease producing in nature, and which comes from healthy cows. To secure such a product which would be free from any bacterial or other contamination during all of the phases between the cow and its final consumption in the home requires modern equipment, modern sanitary measures and good common sense. The question which then arises is how can such a product be produced at the least cost?

The big sources of contamination of milk are the cow, unclean utensils, the milker, the air, and inefficient cooling. The cow should be free from tuberculosis, for bovine tuberculosis is very contagious to babies and younger children. The milker should be free from any communicable disease. Milk borne epidemics such as typhoid, scarlet fever, diphtheria, and septic sore throat are usually of human origin through the carelessness of someone handling the product. Proper sterilization and the use of small topped buckets will admit the least contamination from utensils and air.

To produce milk economically and of a high quality which will give a maximum control of the above sources of uncleanliness we must take into consideration the environment of the cow; the conditions under which the milk is produced and the place where a large part of the farmer's capital is invested, the dairy buildings. This is where concrete enters into the production of clean milk. This sanitary, permanent and fireproof material has unlimited uses on a dairy farm.

In the construction of the dairy buildings we must not consider how cheaply we can build but how well. Cheap construction is not to be tolerated at any cost. Farmers and investigators in this field today are giving serious attention to the problems of farm building cost in relation to production and income. Building to raise the efficiency of the worker, to increase the economy of production and marketing, and to provide other essential shelter requirements is the real goal. This goal can be obtained by a proper manipulation of the factors of wall insulation, proper population and ventilation design which will give us a

dry stable at as slightly fluctuating temperature as possible.

The construction of a dairy barn which will meet the above description in efficiency of design is a dream of all progressive dairymen. Concrete is acknowledged to be the best material on the market for building purposes on account of its cohesive strength and ease of handling. Concrete has long been used as a foundation material. When it is set below the frost line settling does not materially effect the building walls. To secure the proper wall insulation and maintain a dry stable concrete blocks are very effective. They also provide a smooth surface upon which dust and dirt will not collect.

Dirt floors are undesirable and unsanitary. What is required is a hard, water-tight floor which is easily cleaned. Wooden floors retain dirt which adheres to the body of the animal and is therefore unsanitary. Concrete floors present a smooth hard surface which is easily cleaned and conserves liquid manure.

Stalls and gutters when constructed of concrete are more permanent and sanitary than when made of any other material. They can be thoroughly washed and disinfected and the valuable fertilizer nutrients saved when properly drained. The mangers made of fine grained concrete can be washed and drained daily. This does away with decaying food material which is a special fault of wooden mangers, subject as they are to cracks, which provides a place for flies and other disease carrying agencies. A reinforced ceiling provides a sanitary protection from above in place of the old loose wooden boards which allow dust and dirt to fall on the coat of the animal and thus increase the chance of contamination of the milk. Another important feature is the fire protection secured by the concrete ceiling, the cows below can be led to safety without any danger.

Dairy cows may be housed in a modern sanitary barn, yet if allowed to run in a filthy barnyard, it is difficult to keep them clean. Dirt yards are both unsanitary and uneconomical. Foul hoof, foot and mouth disease and very often rosy milk are the result of exercising cows in muddy barnyards. These diseases are very contagious once they secure a foothold in the herd or once the organism causing these diseases infects the soil it is difficult to stamp out. Also dirt barnyards are uneconomical because of the loss of manure and the enormous loss of live-stock from the above diseases. The best way to eliminate this wasteful yard is to establish a concrete paved barnyard which affords a healthful, economic and sanitary exercise pen for the herd.

The fluid milk demand, with its relatively higher winter price, furnishes an incentive to better winter feeding. The use of a silo has been one way in which better winter feeding has been accomplished. And it has been found that a concrete silo furnishes a storage house which is both water-tight and airtight, and ripens ensilage of a good consistency. Such a structure is not subject to shrinking or rotting and is very economical.

One of the most important factors in the production of clean milk is the construction of a milk house which will not

(Continued on page 11)

## Bi-Monthly Meeting of Directors Inter-State Milk Producers Ass'n

The regular bi-monthly meeting of the Board of Directors of the Inter-State Milk Producers' Association was held at its headquarters in the Flint Building, Philadelphia, on May 25th and 26th.

Those in attendance included: H. D. Allebach, president; Frederick Shangle, vice president; R. W. Balderston, secretary; R. F. Brinton, treasurer, and the following directors: S. K. Andrews, J. H. Bennet, Ira J. Book, E. H. Donovan, E. Nelson James, J. W. Keith, S. Blaine Lehman, I. V. Otto, E. R. Pennington, J. A. Poorbaugh, Albert Sarig, C. C. Tallman, R. I. Tussey, H. B. Stewart, S. U. Troutman, F. M. Twining, F. P. Willits and A. B. Waddington.

H. I. Lauver, one of the usually regular attendants at the Directors Meeting, was unavoidably absent owing to the death of Mrs. Lauver. Suitable resolutions of sympathy were adopted by the Board of Directors.

The minutes of the previous meeting as well as those of the various executive committee meetings, held since the last meeting of the directors, were presented and approved. The expenditures made during the months of March and April were read by the secretary, and also approved, as was the financial report for the same months, which was presented by the treasurer.

In order to facilitate the business of the association, Frank M. Twining, a member of the Board of Directors, was elected assistant treasurer and Ralph Zollers, assistant director of the Field and Test Department was elected assistant secretary with such duties as may, from time to time be prescribed by resolution of the Board of Directors.

The committee to have charge of the general arrangements for the annual meeting of the association, which will be held in Philadelphia on November 22nd and 23rd, 1928, was named by President Allebach, as follows: Frederick Shangle, R. F. Brinton, F. P. Willits, F. M. Twining, R. W. Balderston, A. A. Miller and C. I. Cohee.

Frank P. Willits, made a formal report of the Tariff Congress, held under the auspices of the National Milk Producers Federation, in Washington, D. C., during the month, looking toward higher tariff rates on dairy and other agricultural products. Frederick Shangle, Ralph Zollers and A. A. Miller presented brief reports of the Third Annual Dairy Pilgrimage, held in Washington, on May 15th and 16th.

Frank M. Twining, director of the Field and Test Department presented a report on the activities of that department since the last meeting of the Board.

C. I. Cohee, director of the Quality Control Department made a report on the program of the new inspections of dairy farms and milk plants. These new permits became effective on June 1st, and it was estimated that, at the time of this meeting over 95 per cent of the shippers now hold permanent permits.

Among other matters discussed was the serious condition that has developed in connection with garley and grassy milk, particularly in the Eastern Shore of Maryland District; the high prices of dairy feeds, as compared to those of a year ago and the higher prices of dairy cows. In this latter instance there was a considerable variance in the prices paid in different sections of the milk shed.

H. D. Allebach, president, presented a report on general market conditions as well as details of the proposed method of applying the Philadelphia Selling Plan for 1929. The various items of this plan were considered and approved. The program will now be presented to the cooperative buyers of milk for consumption.

J. O. Eastlack, station, presented a report on the production of milk together with various details in reference to consumption.

Formal reports of conditions in the field were presented by all the directors present. Conditions on the whole were favorable although in some western sections production was severely checked by heavy snow falls during the closing days of April.

On Friday evening the directors attended a performance of "A Masque of Beauty Through the Ages"—a Dairy Council production by the students of the Tilden Junior High School, 65th and Elmwood Street, Philadelphia. The production was presented on May 23rd 24th and 25th as a school project and was exceptionally well presented.

### Fleetwood Meeting

Over sixty dairy farmers attended a meeting at Fleetwood, Berks County, Penna., early in May, to consider and discuss milk marketing situation.

Albert Sarig, a director of the Inter-State Milk Producers' Association, presided.

An address was made by H. D. Kinsey, field representative of the association in that district, who referred particularly to the butter fat check testing and the herd testing system for butter fat content in milk, by the Testing Department of the Milk Producers' Assn.

Frederick Shangle, Vice President of the Inter-State Milk Producers' Association, outlined the general policies of the organization, its method of settlement, under the basic and surplus plan by the various cooperating dealers and portrayed briefly the general market conditions in the Philadelphia Milk Shed.

County Agent Adams made a brief address in which he outlined the advantages of the tuberculin test in dairy cattle. He referred also to the advantageous results of the Cow Testing Association in arriving at the production value of each cow in the dairy herd.

### Report of the Field and Test Department Inter-State Milk Producers' Association.

The following statistics show the aggregate operations of all the Inter-State Milk Producers' Association field men in connection with testing, weighing and general membership work, for the month of April, 1928.

No. Tests Made ..... 6543  
No. Plants Investigated ..... 59  
No. Membership Calls ..... 311  
No. New Members  
Signed ..... 100  
No. Cows Signed ..... 802  
No. Transfers Made ..... 26  
No. Meetings Attended ..... 7  
No. Attending Meetings ..... 450

## Cow Testing Associations

### Keystone Dairyman Sets New Butter Fat Mark

Obtaining a butterfat production of over 500 pounds per cow, H. A. Snyder, Montoursville, has established a new record for cow testing association herds, says E. B. Fitts, in charge of the dairy extension work at the Pennsylvania State College. Snyder is a member of the White Deer Valley Association in Lycoming county. For the year just completed his 14 registered and grade Holsteins averaged 526.4 pounds of butterfat and 14,283 pounds of milk. The best previous record was 495.9 pounds of butterfat, made in 1927 by the Guernsey herd of Fairacres Farm, Sewickly, in the Allegheny County Association.

A remarkable feature of the Snyder herd is that more than half of the cows are young animals. Four of them are 2-year olds milking for the first time and four are 3-year olds in their second year of lactation. The best cow in the herd is a 5-year old registered Holstein which gave 17,677 pounds of milk containing 229.3 pounds of fat. Eleven cows in the herd surpassed the 400 pound mark.

During the past three years Snyder's herd has increased rapidly in production. In 1926, he had 17 cows which averaged 9,642 pounds of milk and 342.1 pounds of fat. The next year 16 cows averaged 10,845 pounds of milk and 400.6 pounds of fat. This year the record was set.

### GARDEN SPOT COW TESTING ASSOCIATION

The Garden Spot Cow Testing Association finished its year on May 1st with six members. There were 116 cows in the association during all or part of the year. The results for the Association are as follows:

Average No. of Cows in Association	85.7
Average per cow: Pounds of Milk	10,154
Pounds Butterfat	337.6
Percentage of Butterfat	3.3
Value of Product	\$294.98
Cost of Pasture	10.91
Cost of Roughage	46.31
Cost of Grain	52.75
Total cost of Feed	109.97
Value of Product over feed cost	185.01
Return of \$1.00 expended for feed	2.68
Feed cost per 100 lbs. milk	1.08
Feed cost per lbs. of fat	.33

Five herds with an average of five or more cows—exceeding an average production of 300 pounds of butterfat, were as follows:

Owners Name and Address	Aver. No. Cows	Lbs. Milk	Lbs. Fat
Ira M. Eby, Gordonville, .....	16.3	11,457	376.9
Mart Staltzfus, Morgantown, .....	17.3	11,289	375.9
Elmer Staltzfus, Elverson, .....	12.3	9,874	345.6
George G. Sauder, East Earl, .....	13.9	9,455	317.7
M. V. Brubaker, New Holland .....	9.3	9,656	304.2

### MONTGOMERY COUNTY COW TESTING ASSOCIATION

During the month of April twenty-four herds were tested having 364 cows in milk and 29 dry. Nine unprofitable cows were disposed of during the month. Seventy-cows produced over 40 pounds and 14 produced over 50 pounds of fat. Seventy-eight cows produced over 1000 pounds of milk while 38 produced over 1200 pounds.

#### Highest Herd Average Milk Production

Owner	Breed	Cows in Herd	Average Lbs. milk
Landis, Wm. H. ....	H	18	1,165
Gerhard, Owen .....	H	24	1,008
Schultz, Est. Levi .....	H	14	971
Ursinus College .....	H	18	945

#### Herd Average Over a Pound of Butterfat per Day

Owner	Breed	Cows in Herd	Average Lbs. Fat
Landis, Wm. H. ....	H	18	40.5
Schultz, Est. Levi .....	H	14	34.7
Gerhard, Owen .....	H	24	34.1
Ursinus College .....	H	18	32.1
Bieler, Mrs. H. ....	H	15	31.3
Hartman & Weinberger .....	H	12	30.9
Rothenberg, L. ....	H	8	30.3

### MONTGOMERY COUNTY COW TESTING ASSOCIATION No. 2

During the month of April, 21 herds were tested, having 428 cows in milk and 37 dry. Forty-eight cows produced over 40 pounds, and 11 produced over 50 pounds of fat. Forty-nine cows produced over 1000 pounds milk while 16 went over the 1200 pound mark.

#### Highest Herd Average Milk Production

Owner	Breed	Cows in Herd	Average Lbs. milk
Overly & Sons, J. L. ....	R. H.	11	856
State Hospital .....	G. H.	59	778
Bruckman, Frank, .....	G. H.	7	770
Jennaria, J. H. ....	R. & G. H.	15	632
Davis, George .....	R. A.	22	610

#### Highest Herd Average Butterfat Production

Owner	Breed	Cows in Herd	Average Lbs. Fat
Overly & Son, J. L. ....	R. H.	11	26.6
State Hospital .....	G. H.	59	26.3
Bruckman, Frank, .....	G. H.	7	25.6
Jennaria, J. H. ....	R. & G. H.	15	25.4
Davis, George .....	R. A.	22	25.0

### Pennsylvania Cow Wins Gold Medal

W. M. Anderson of Philadelphia, Pa., has tested the purebred imported Jersey cow, Sybil's Beauty Imp., and she proved to be such an excellent producer that she qualified for the American Jersey Cattle Club Gold Medal with a wide margin to spare. She was started on this official production test at the age of 6 years and 7 months and in the follow-

ing year she produced 734.79 lbs. of butterfat and 16,165 lbs. of milk. She was "with calf" 228 days while making this splendid record. During the test she produced as much as 82 lbs. of butterfat in one month.

Sybil's Beauty was shown at the Eastern Pennsylvania Parish Show and she was judged to be the best Pennsylvania cow exhibited there

## The Problem of Cooling Milk on the Farm

### Electric Milk Cooling Cabinet a Factor

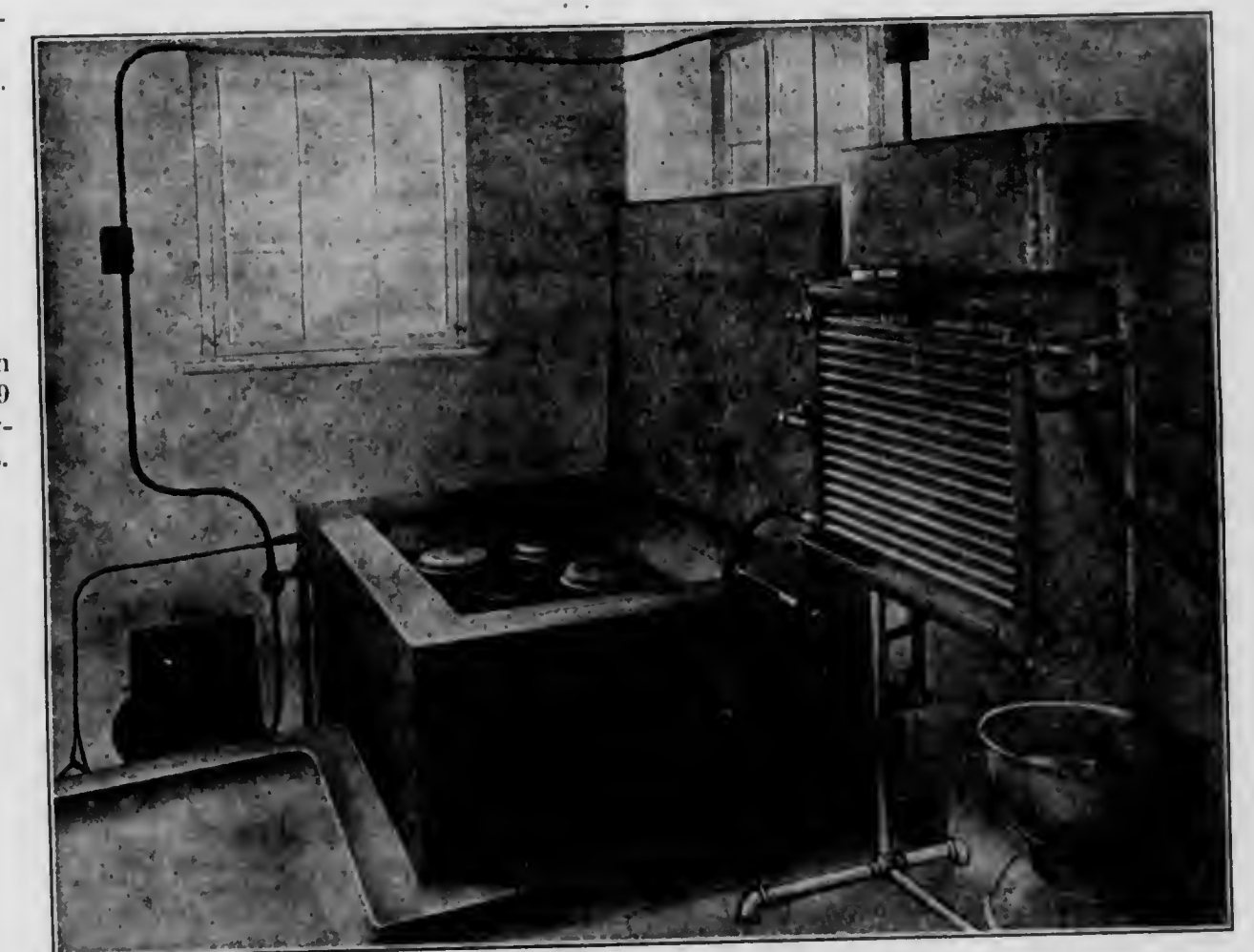
The problem of caring for milk prior to its shipment is a problem that is becoming more and more important. Ordinances passed by various local Boards of Health and even specific state wide regulations are becoming more exacting. Many of these regulations require that the milk be quickly cooled, directly after milking, to a low temperature, in instances particularly in the case of the higher grades of milk, below 50 degrees Fahrenheit. In many cases this presents an important problem to the dairy farmer.

In many cases milk cannot be cooled to a 50 degree temperature with water alone, and to purchase and transport ice to the dairy farm each day for this purpose is very expensive, and in some instances, requires much time.

However, it has been determined that to produce milk with a low bacteria content and long keeping qualities, it must be quickly cooled and stored at a temperature below 50 degrees. The milk distributors must deliver milk to their

chasing, if efficient results are to be obtained. For example, a dairyman whose dairy produces eight cans of milk per day (2 milking), should install a Cabinet of dimensions large enough to accommodate eight cans of milk; as this Cabinet will have ample water content to quickly cool four cans of milk at each milking and still provide storage at below 50 degrees. However, if a Cabinet of inside dimensions only sufficient for cooling four to six cans of milk per day, was used for cooling eight cans per day, the water content would not be sufficient and quick and efficient cooling would not be obtained, neither will it be possible to store the milk below 50 degrees after cooling.

If a four can Cabinet should be used to cool eight cans of milk in twenty-four hours, the water in the Cabinet would reach too high a temperature and the cooling coil would pick up the heat so fast that the compressor would become overloaded, very likely stalling the motor; a condition which may be com-



A Modern Electric Cooling Cabinet and Equipment

customers in the best of condition and consequently, the cooling and storing of the milk on the dairy farm is given very close attention by their inspectors. In many cities, premiums are paid to dairymen who cool and store the milk produced, to below 50 degrees.

The Electric Milk Cooling Cabinet has recently been designed and developed from an engineering standpoint, primarily for cooling and storing milk on the dairy farm, and many are in operation all over the country. These cabinets are strongly constructed, yet attractively finished and are built in different sizes, having capacity to cool quickly and efficiently from four to fourteen cans of milk per day.

Each different size cabinet is equipped with the required amount of cooling coil, the required Electric Refrigeration Unit and of proper inside dimensions to hold a sufficient number of gallons of water to quickly and efficiently cool a given number of gallons of milk each day.

It is very important that a dairyman select the proper size Cabinet when pur-

pared to the overloading of an automobile engine when pulling a hill on high gear with too heavy a load, causing the engine to knock and stall.

If improvised electric milk cooling outfits are made by using present cement tanks, or new cement tanks are built, the inside dimensions should be given very thorough consideration and it should be definitely determined that the tank will hold a correct amount of water before an electric refrigeration unit is installed. If the water content is not sufficient and the cooling coil is not correct, the device will very likely not operate satisfactorily.

Accompanying this article is a reproduction of a picture of one of the latest devices for cooling and storing milk on the dairy farm. This device has been designed and developed for this purpose from an engineering standpoint.

These new Electric Milk Cooling Cabinets are equipped with motors ranging in size from 1/4 H.P. on a four can size to 1 H.P. on a fourteen can size. This insures very inexpensive operation. For

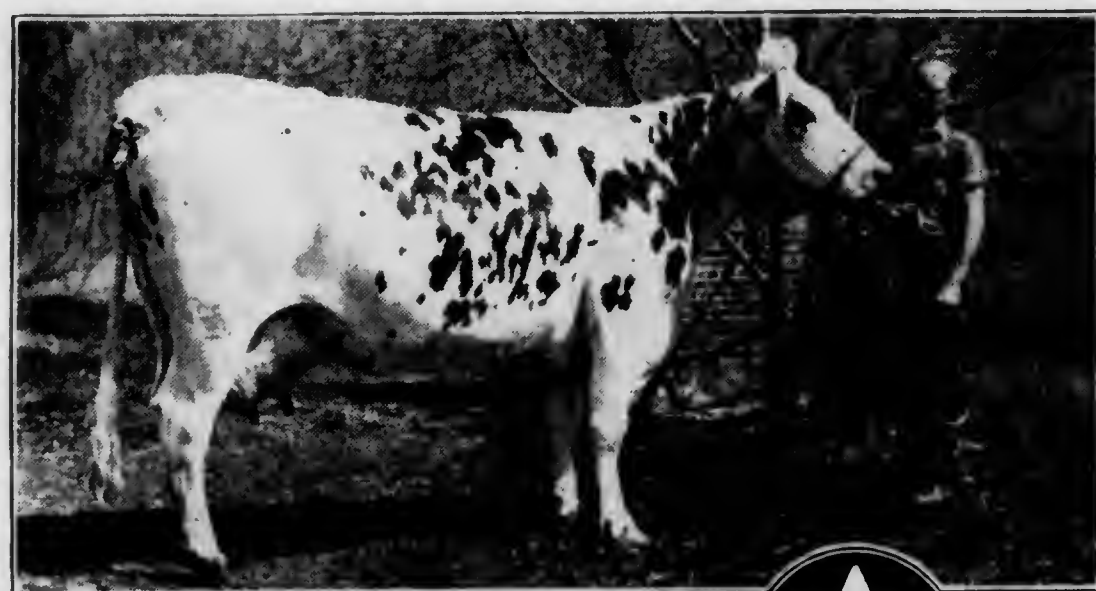
(Continued on page 7)







## 26,320.9 lbs. of milk 1270.81 lbs. of butter on AMCO 20% NATIONAL



### ON PASTURE

Early pasture stimulates but does not supply enough digestible feed to sustain milk production. To cows on pasture feed AMCO 18% DAIRY or AMCO 20% DAIRY.

test was AMCO 20% NATIONAL.

Amco mixes two approved open formula

20% dairy feeds—AMCO 20% NATIONAL (fixed formula) for special feeding such as is required by advanced registry work, and AMCO 20% DAIRY (variable formula) which is the dairyman's best buy for commercial milk production. Your Authorized Amco Agent can supply you.

DIVISION OFFICE:  
MUNCY, PA.

## AMCO

FEED MIXING SERVICE

AMERICAN MILLING COMPANY  
EXECUTIVE OFFICES: PEORIA, ILL.

Plants at:  
Peoria, Ill., Omaha, Neb., Owensboro, Ky.

Alfalfa Plants at:  
Powell, Garland, and Worland, Wyo.

Early in her second test she was producing 86 lbs. of milk daily on a home mixed test mixture. The herdsman began feeding AMCO 20% NATIONAL and in a few days increased her daily milk production to 106 lbs. That settled it! Her only grain mixture for the rest of the

## Third Annual Dairy Pilgrimage

(Continued from page 1)

which they originate. There is no one set plan which spells success for all cooperatives. Development and research work is necessary to establish the plan and method best suited for the individual cooperative enterprise.

Dairy Market Information was the subject of an address by J. Clyde Marquis who outlined the market news service and referred to its development. In this work the demand factor rather than the supply factor is the important factor. He stressed this fact in particular, making it clear that price was based on demand and that production, preparation, good marketing methods were strong factors in building up a satisfactory demand.

Following these addresses the group proceeded to the Bureau of Dairying, where a luncheon was served. The dairy products used at the luncheon having been made in the laboratories of the Bureau.

Visits were then made to the various laboratories of the Bureau, where addresses were made by representatives of the laboratory force, explanatory of the work done under the various projects.

American Dairy Federation Dinner  
The American Dairy Federation Dinner in honor of the Official Delegates to the Eighth International Dairy Congress to be held in Great Britain, June-July 1928 was held at the Harrington Hotel, on Tuesday evening.

This dinner was held to perfect an organization of the Delegation and to discuss purposes to be served on behalf of the American Dairy Industry by participation in this Congress.

E. M. Bailey, president of the American Dairy Federation presided, while A. J. Glover, Editor, "Hoards Dairyman" acted as toastmaster.

Hon. R. W. Dunlap, assistant Secretary of Agriculture, made an address on the Representations of the United States Department of Agriculture.

Hon. E. E. Browne, of the House Committee on Foreign Affairs, made an address on "What Congress Would Like to Have the Delegates Accomplish."

Dr. L. A. Rogers, acting chief of the Bureau of Dairy Industry, spoke on American Scientific Contribution to the Congress, while

Dr. H. E. Van Norman, president American Dry Milk Institute and President of the 1923 World's Dairy Congress Association made an address on "The Work of the World Dairy Congress."

A brief address was also made by L. J. Taber, Master of the National Grange. The following list of Delegates on the part of the United States to the Eighth International Dairy Congress, was named as follows:

Hon. R. W. Dunlap, Ohio, Assistant Secretary of Agriculture, Washington, D. C.; Dr. L. A. Rogers, Acting Chief, Bureau of Dairy Industry, U. S. Department of Agriculture, Washington, D. C.; Mr. Roy C. Potts, Chief, Dairy Marketing Division, B. A. E., U. S. Department of Agriculture, Washington, D. C.; Dr. G. E. Sherwood, Dairy Farmer, Kimball, Minn.; Mr. John Brandt, President, Land O'Lakes Creameries, Inc., Minneapolis, Minn.; Mr. A. J. Glover, Editor, Hoards Dairyman, Fort Atkinson, Wisconsin; Mr. J. D. Mickle, State Food and Dairy Commissioner, Portland, Oregon; Prof. J. B. Fitch, Kan. (Continued on page 10)



## The Key to Cleaner Milk

The work of producing clean milk is greatly simplified when the dairy barn floor is concrete.

Better still, a concrete floor in your dairy barn saves labor, lowering your producing cost.

### Modernize Your Barn Now!

You can build a concrete floor yourself. Once laid, it is permanent, odor- and-vermin proof, and easily kept clean.

A postcard will bring complete information.

PORTLAND CEMENT ASSOCIATION

1315 Walnut St., Philadelphia

A National Organization to Improve and Extend the Uses of Concrete

Offices in 32 Cities



10 Day Test

Write today for descriptive literature and particulars of how Dr. Clark's PURITY Milk Strainers help you get Grade "A" test and more money for your milk.

It is the only Strainer made that's guaranteed to strain 100% clean. Our 10 Day Trial Test enables you to prove it at our risk—your money back if it fails to remove ALL the dirt. Thousands in use—two sizes 10 qt. and 15 qt. Sold by dealers everywhere. (9)

PURITY STAMPING COMPANY  
Dept. F5 Battle Creek, Michigan

DR. CLARK'S  
**Purity**  
MILK STRAINER



CRUMB'S  
STANCHIONS

Also Water Bowls  
Litter Carriers  
Feed Carriers  
Steel Stalls  
Steel Partitions

I can SAVE MONEY for you. Send for booklet.

WALLACE B. CRUMB  
Box 2, Forestville, Conn.

**Alfalfa Hay For Sale**  
New crop ready for shipment by July 15. Write for delivered prices to

JOHN DEVLIN HAY CO., Inc.  
192 N. Clark St., Chicago, Ill.

## The Problem of Cooling Milk on the Farm

(Continued from page 3)

example:—To cool eight cans of milk or 320 quarts from 65 degrees to 45 degrees, requires that approximately 20,000 heat units be removed. In addition to this load, the heat from the air on a day when the outside temperature is 80 to 85 degrees, must be considered, because no matter how well a cabinet is insulated, this outside heat will leak in. This leakage of heat must be added to the actual heat to be removed from the milk to determine the total amount of heat to be removed to cool the milk. These cabinets have been developed along these lines and to cool eight cans of milk, the motor will operate approximately 12 hours during a twenty-four hour period. If electric current cost 5 cents per 1000 watts, the total cost of operation of an eight can cabinet for twenty-four hours, cooling eight cans of milk, would be 30 cents. To cool the same amount of milk with ice, will require the melting of approximately one hundred and fifty (150) pounds, and if ice costs 35 cents per hundred, the total cost would be 53 cents per day.

Well designed Electric Milk Cooling Cabinets maintain an even temperature at all times and are entirely automatic in operation. The inside temperature will never go above 43 degrees, nor below 36 degrees. Cans of milk direct from the cows, placed in one of these Cabinets at 90 degrees, will be reduced to a temperature of 45 degrees in one hour and thirty minutes, and stored at that temperature until taken out. Cans of milk which have been pre-cooled with an aerator and placed in the Cabinet at a temperature of 65 degrees, will be reduced in temperature to 45 degrees in one hour.

This method of quick cooling, and cool, clean storage insures a low bacteria count, and in many instances, a premium for the dairyman.

From the standpoint of economy an aerator should be used with an Electric Milk Cooling Cabinet to assure the best results and the most economical operation. It may be used in two ways:—

First: The cold water from the Cabinet may be circulated through the entire aerator and returned to the Cabinet by a small circulating pump. In this way the milk will leave the aerator at any desired temperature between 40 degrees and 50 degrees, and may be shipped at once or stored in the Cabinet. By this method, all the heat from the milk is carried into the water in the Cabinet.

Second: Well or spring water may be circulated through the upper half of a double aerator and piped to a tank or wasted. The water from the Cabinet may be circulated through the bottom half of the aerator and returned to the Cabinet. By this method, the well or spring water will reduce the temperature of the milk to approximately 65 degrees and the water from the Cabinet will reduce the temperature to below 50 degrees. By this method, the water in the Cabinet only takes up the heat absorbed in reducing the milk from 65 degrees to below 50 degrees, so that the operating time of the motor and refrigeration unit are greatly reduced.

These combinations have proven quite satisfactory in practice and eliminate over-loading the cooling system.

# Cool your Milk this new and better

Way. . . Cool it quickly to below 50 degrees and KEEP IT

COOL. Do this if you want top prices . . . and if you want to supply milk that is clean, wholesome and low in bacterial count.

The ESCO Milk Cooling Cabinet is designed exclusively for cooling and storing milk on the dairy farm. Operated by electric refrigeration . . . controlled automatically, maintaining a uniformly low temperature. Cans of milk placed in the ice cold water of an ESCO Cabinet are cooled quickly and kept at a temperature below 50 degrees.

It is the easiest method—clean, trouble-free and inexpensive. Exactly what you have been seeking.



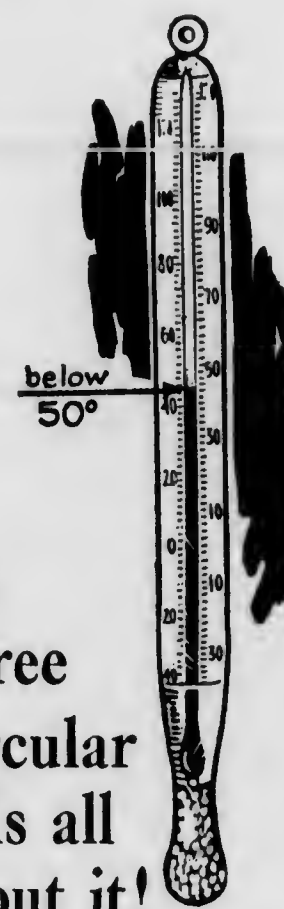
ELECTRIC MILK COOLING CABINET

Some territory still open for distributors and dealers

Built in 4, 6, 8, 10, 12 and 14-can capacities. Insulated with 3" cork on all sides. Refrigerating coils encircle interior.



Send for complete information  
ESCO Cabinet Co., West Chester, Pa.  
Please send me full information concerning the ESCO Milk Cooling System for dairies.  
Name . . . Address . . . Town . . . State . . .  
I make . . . per cans of milk (2 milkings)



Free Circular tells all about it!

Send for it Now!

TRADE MARK **NICE** REG. U.S.A.

THE NAME TO GO BY—WHEN YOU GO TO BUY  
**PAINT AND VARNISHES**  
Write for color Cards and Booklet "Paint Pointers"  
EUGENE E. NICE COMPANY, Inc., PHILADELPHIA

### Follow Plan in Work

The successful farmer plans his work and never procrastinates when the time for doing things arrives. In this way every operation is cared for promptly, nothing is sacrificed because of delays or lack of time, and above all he always has time to take the family for short vacations at various times. Life on the farm thus becomes more enjoyable each year.

### Kill the Corn Borer

When all of the previous year's corn crop is properly disposed of before June 1, 95 to 98 per cent of the corn borers are killed. Plowing controls them when no pieces of plant material are left on the surface. The borers will crawl to the surface from some of the buried stalks, but if the surface is clean they find no shelter there, and die from exposure or the attacks of their natural enemies.



Let Us Design Your Stationery

**Horace F. Temple**  
Printer

Bell Phone No. 1  
WEST CHESTER, PA.

Because of high prices of dairy cows, many more heifer calves are being raised than normally.





## Readiness for School

Julia Wade Abbot\*

Director of Kindergarten Education,  
Philadelphia Public Schools

"Ready for school" used to mean a newly bought slate and lunch box, a clean apron and mother's goodbye kiss. But now school readiness has a deeper meaning. The summer round-up of pre-school children is evidence of a realization of the relationship between success in school and a child's physical condition. Important as is the correction of remediable defects before school entrance, there are other phases of preparation for school life which should be carried on during the pre-school years. As Dr. Gesell says, "Though the child may not learn to read in the pre-school years, he is mastering the alphabet of life."

Regularity in the life of the young child is essential in preparation for the regularity of school life. Definite times for elimination, for rest, for eating is as important in the life of the three and four year old child as in the years of infancy. The child who has had an ordered life is not only better prepared physically for school life but the right attitude towards regularity has been established. He is in tune with a definite rhythm of events. He has a feeling of law and order as a basis for willing obedience.

Habits of obedience are formed in the pre-school years. The child who is given few commands and who realizes that these are based upon impersonal law and not upon the personal whims of the adults in his baby world is ready to obey the laws of the school community. The baby who is taught to feed himself, even if he spills his food in the beginning, is the child who will attack the new problems of school life without too much dependence upon the teacher. The four-year-old who has never learned to put on rubbers or sweater is not ready for school. Independence is an essential character trait in the early years.

Not only must the young child be made physically independent of his mother but he must be freed gradually from too great an emotional dependence upon her. The shock of being separated from his mother for the first time at the beginning of school life is a poor preparation for school success. Children are sometimes actually dazed with unhappiness the first weeks of school. From a very early age the mother must enlarge the child's horizon by companionship with other children and with adults. Every loving mother enjoys the baby's dependence upon her for all his needs. But it is a selfish love that fosters this dependence at the cost of the child's development. Lindbergh would never have flown across the ocean alone if he had not had a mother who let her son live his own life.

Vigorous activity in the early years is essential for physical and intellectual growth. The child who plays with interest and purpose is the child who will work earnestly and intelligently. Providing toys with which the child can

(Continued on page 9)

## Good Dishes from Your Garden

### RHUBARB ROLL

2 cups flour.  
4 Teaspoons baking powder.  
1 Teaspoon sugar.  
3 Cup Sweet milk.  
3 Tablespoons lard.  
3 Teaspoon salt.  
Mix first six ingredients as for biscuit dough and roll out about 1/4 inch in thickness. Spread with rhubarb cut into small pieces and sugar, roll as for cinnamon buns. Bake until done. Serve with sauce made of rest of rhubarb, stewed and sweetened.

### CREAMED PEAS

1 can peas drained or  
2 c. fresh peas  
2 c. milk  
4 tbsps. flour  
4 tbsps. butter  
1 tsp. salt  
Pepper  
Make cream sauce by melting the butter, add the flour to make a smooth paste. Add the milk, one-third at a time, stir to avoid lumps. Add seasoning and peas. Heat in double boiler until the peas are thoroughly warmed.

### CREAM OF ASPARAGUS SOUP

Wash each stalk of asparagus carefully with a vegetable brush to remove all grit. Then cut in small pieces (using all but the very tough parts). Cook, covered, until the asparagus is tender, in enough water to cover. Add salt to taste just before the asparagus is done. Allow 2 cups cooked asparagus and cooking water to 2 cups medium cream sauce (2 oz. milk, 4 tbsps. butter). Season. serve hot.

NOTE—The less tender part may be cooked longer and put through a sieve.

### STRAWBERRY TAPIOCA

3 tbsps. granulated tapioca  
4 tbsps. sugar  
1 1/4 c. hot water  
1/8 tsp. salt  
1/2 tsp. vanilla  
1 c. strawberries  
1/4 c. sugar  
Wash and hull strawberries. Cut in halves with spoon. Add sugar. Set in cold place. Mix tapioca, sugar and salt and add boiling water slowly. Cook ten minutes in upper part of double boiler. Add vanilla. When cold add the strawberries. Serve cold with whipped cream.



## School Boys and Girls Receive Instruction in Proper Care of Younger Members of the Family

The youngsters in a family who frequently bear a large portion of the responsibility of caring for a baby brother or sister are entitled to know how to do this properly, is the belief of the Gotwals School, Norristown, Pennsylvania.

"How We Can Make Our Home More Attractive" was the subject of an unusual project conducted by Miss Helen Stiles in the Sixth Grade of the Gotwals School, in which Miss Frances Fern Hoag of the Philadelphia Inter-State Dairy Council cooperated. Rightly enough, one of the important features in decorating the home is certainly to learn how to improve the baby in it!

The instruction in baby-care furnished an excellent opportunity to teach the growing children the need of applying the same health rules to themselves that were so important in the life of a baby. The necessity for cleanliness. Sterilization of food utensils. Fresh milk only. Regular hours for feeding. Plenty of

sleep and fresh air. Safeguarding against disease by building a strong body. These were a few of the points which this supervised nursing practice brought before the boys and girls in a graphic way.

The manual work in connection with the project involved the construction of a simple crib, wire screening for fly protection, and neat white painting. Lastly a crib equipment of the proper kind and amount of bedding.

A collection of pictures illustrating the loveliness of healthy babyhood was made with the assistance of the Business Section of the Philadelphia Home Economics Association. These pictures were used to decorate the walls of the classroom.

It is a long step in the right direction when children are not only being taught to observe the health rules, but are interested in the welfare of the younger members of the family who are regarded as assets rather than liabilities.

## The Farmer in a \$10,000 Circus Saddle

"You've got to move, and move fast in the show business," said a cowboy who has been on the road twenty years, after demonstrating some of his trick stunts a few days ago in Philadelphia before a gathering of the Circus Fans Association of America. "That means not only the boys in the ring, but the kitchen force and the whole outfit. There are more things to a circus than most people know."

This last statement was well illustrated in the fact that few people were aware that the circus which they were seeing at that time represented the hobby of the late Colonel Joe Miller, one of the three Miller brothers of Marland, Oklahoma, owners probably of the largest diversified farm ranch in the world. Thousands of acres are being intensively cultivated annually on the Miller ranch, with wheat and sweet potatoes as the two largest crops.

The herd of two hundred pure-bred Holstein cows is made up of many prize-winning cattle. The milk from this herd, together with the products of the creamery and ice cream plant, is consumed to a large extent by the cowboys employed on the ranch. Meat packing houses, a supply store and cafeterias are likewise operated on the ranch.

Colonel Miller made his "101" hobby a competitive award of merit for physique and skill developed in the various outdoor activities on the ranch.

Those cowboys whose skill in riding, roping and sharp shooting secures them a place in the show find that food arrangement, which is an important factor in their daily life, is as complete as in Marland. On the arrival of the circus in a town, the first tent up is the kitchen, with its row of ranges and steam boilers which can be put in almost instantaneous action. An hour after arrival on the grounds the ranch family of seven hundred can be served a breakfast of practically the same foods in much the same fashion as under ordinary circumstances.

Two day emergency ration is always carried by the commissary wagons. However, as the troupe is on the move almost every night, such perishables as green vegetables and the three hundred quarts of milk used each day must be ordered ahead and delivered to the refrigerating wagon after each stop is made.

Special food must also be provided for the American Indians, each of whom is bonded by the circus employing them, guaranteeing their safe return to the government reservation. The necessary feed and grain must likewise be carried for broncos and work horses, buffaloes, steers, elephants and camels.

"Little Joe" as the young son of the late Colonel Miller is affectionately known within the ring is an agricultural college man who specialized in dairying. Since the death of his father, he has been learning the various ropes of the circus business with the likelihood that someday he will ride in the Colonel's ten thousand dollar silver-mounted jewel-studded saddle at the head of the "101" Ranch.

## Nearly 620,00 Boys and Girls In 4-H Clubs Last Year

Final figures on the number of farm boys and girls who carried on 4-H club work in 1927 are announced as totaling 619,712. "This total," said C. W. Warburton, director of Extension Work, United States Department of Agriculture, "is a source of pride to all cooperative extension workers and the department and the State agricultural colleges which they represent."

"It means," Director Warburton stated, "that during the year over 619,000 young people of rural communities in every State voluntarily undertook to demonstrate an improved farming or homemaking method and cooperated in an effort to benefit their communities. Whether or not the individual club member was able to complete his or her club undertaking, he had the benefit for a time of contact with others who were interested in farm life and with ways for making it an 'up-and-coming' enterprise. Four-H club work with its four-fold development of head, hand, health and heart through practical experience in the latest and best methods for agricultural and home economics activities under the direction of cooperative extension workers, furnishes such opportunity."

"Club enrollment is growing steadily through the combined efforts of all cooperative extension workers. Each year we have increased the number of boys and girls who have participated in 4-H club work even though the number of agents has not materially increased. That this has been done through the use of sound educational principles is shown by the fact that the quality of work has been maintained with the increased number of club members. In 1924, with 3,419 county extension agents, 55 per cent of the boys and girls who enrolled in 4-H clubs completed every detail required in their undertakings. The next year, with 54,000 more boys and girls enrolled and only 19 additional agents, 58 per cent of the enrollment was completed. In 1926 the percentage was 62.8. This past year when we increased the number of boys and girls enrolled in clubs by 33,000 over the previous year and the working staff of county extension agents by only 22, we were still able to make a little better record in completions than the year before, 64.4 percent of the boys and girls who enrolled carrying on to the finish. This, I feel, could not have been done without the generous amount of time and interest given by the 60,000 local men and women who acted as volunteer leaders of clubs and the steadily improving methods in conducting club work."

## Readiness for School

(Continued on page 8)

carry out his play purposes develops persistence and invention. In addition to vigorous play every young child should have a few regular duties which contribute to the comfort of the family life.

Do not wait to prepare a child for school the last of August. "Begin at the beginning" and he will be ready when the time comes.

Julia Wade Abbot is a member of the Advisory Board of the Philadelphia Inter-State Dairy Council. She sent this message to mothers through the pages of the "Counsellor," the organ of the Philadelphia Council of Home and School Associations.

## DRINK MILK FOR HEALTH

**How Much Milk is in This Pasture?**

THAT depends on the man who owns it. You can make your pasture a six weeks' stimulant, or free roughage all summer. If it's worked to death for six weeks, a lot of the milk material will be wasted. Supplement your pasture with Orange Checker Cow Chow and you'll keep getting full buckets this summer when your neighbors' herds are in a slump. Ask your dealer for Orange Checker Cow Chow. The same old Cow Chow quality—at an attractive price.

PURINA MILLS, 854 Cratiot Street, St. Louis, Mo.  
Eight Busy Mills Located for Service  
Write us for a Purina Cow Booklet—free

**PURINA CHOWS**

24% PROTEIN COW CHOW  
20% PROTEIN COW CHOW  
CALF CHOW BULKY-LAS PIG CHOW HOG CHOW

**PURINA ORANGE CHECKER 16% PROTEIN COW CHOW FEED**

Evidence that tuberculosis testing and the slaughter of reacting animals is having an important effect on the health of cattle generally in this country is found in the reports of tuberculosis found in animals slaughtered under Federal inspection. In 1917 the average, exclusive of reactors was 2.4 per cent. In 1927, after 10 years of testing and killing of reacting animals, the proportion detected by the meat inspectors had been reduced to only 1.1 per cent, indicating that in

## Philadelphia Inter-State Dairy Council

General Offices  
219 N. Broad St., Philadelphia

A cooperative movement established for the dissemination of information and publicity pertaining to the production and distribution of dairy products and their food value in nutrition.

Affiliated with the National Dairy Council

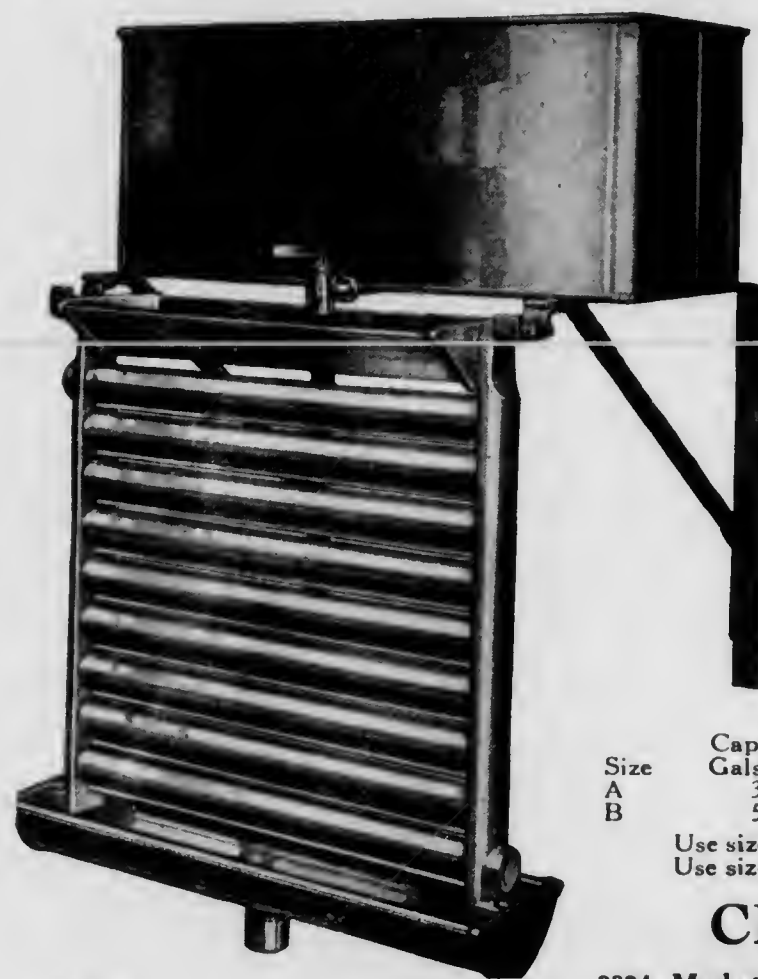
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the cattle shipped for slaughter there is less than half as much tuberculosis as there was 10 years ago.—U. S. Department of Agriculture.



## The "Authorities Choice" Cooler at a Special Low Price



You can easily have a good tubular cooler now because the Oriole does away with the old high price. It's a real high class tubular cooler made entirely of copper and bronze, heavily tinned all over. It's guaranteed to withstand a 75 pound circulating pressure.

Keeping an Oriole clean is an easy job because there are no square corners or crevices and the tubes are spaced for easy cleaning.

A solid copper tank and a pair of brackets are furnished with every cooler.

The small size cools 35 gallons an hour, enough to handle the work of up to three milkers. The large size cools 50 gallons an hour or enough to handle the work of up to five milkers.

The Oriole cooler is the "once and for all" solution to your cooling problem. The money saved in prevented losses will quickly pay for one.

Order an Oriole today. Inspect and test it thoroughly. If the design, quality and workmanship does not meet with your entire approval ship the cooler back at our expense. Your money will be refunded without question. No offer could be fairer than this.

Remember, you don't risk a penny. If you desire, we will send you a complete descriptive circular.

Size	Capacity Gals. Hr.	Ht. Cooler Reservoir	Length Overall	Shipping Weight	Capacity Reservoir
A	35	33"	21 1/2"	70 lbs.	10 gal.
B	50	33"	31 1/2"	85 lbs.	10 gal.

Use size A for 3 milkers.  
Use size B for 5 milkers.

**CHERRY-BASSETT CO.**

2324 Market St., Phila., or Russell and Ostend Sts., Baltimore, Md.

**\$34.50**  
Large Size  
**\$40.50**

FOB.  
Balto.  
SOLID COPPER TANK  
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Grass by itself is not a balanced ration for cows.

## Third Annual Dairy Pilgrimage

(Continued from page 6)

sas State Agricultural College, Kansas; Mr. A. M. Loomis, American Dairy Federation, Washington, D. C.; Mr. P. H. Kasper, Cheese Manufacturer, Bear Creek, Wisconsin; Prof. A. A. Borland, Pennsylvania State College, State College, Pa.; Prof. O. E. Reed, Michigan Agricultural College, East Lansing, Michigan; Dr. C. W. Larson, Director, National Dairy Council, 307 North Michigan Avenue, Chicago, Illinois; Dr. H. E. Van Norman, American Dry Milk Institute, 160 La Salle Street, Chicago, Illinois; Mr. A. L. Haacker, President, Allied State Creamery Association, Lincoln, Nebraska; Mr. Harry Bull, Secretary, Dairyman's League, Campbell Hall, Orange County, New York; Judge J. D. Miller, President, National Cooperative Milk Producers' Federation, 120 West 42nd Street, New York, New York; Mr. E. T. Rector, President, Fairmont Creamery Company, Omaha, Nebraska; Mr. W. J. Schilling, President, Twin City Milk Producers' Association, Raymond and University Avenues, St. Paul, Minn.; Mr. Fred Rasmussen, Secretary, International Association of Ice Cream Mfgs., Harrisburg, Pa.; Mr. E. M. Bailey, President, American Dairy Federation, Pittsburgh, Pa.; Dr. Robert S. Breed, Bacteriologist, Agricultural Experiment Station, Geneva, New York; T. H. McNairy, president, National Dairy Products Assn., New York City; Dr. E. B. Meigs, Bureau of Dairy Industry, Department of Agriculture, Washington, D. C.; Mr. Frank S. Harmon, Director of the Ohio Guernsey Breeders' Association, Cleveland, Ohio; Mr. H. W. Jeffers, Walker-Gordon Laboratory Company, Plainsboro, New Jersey; Mr. D. M. Dorman, President, The California Dairies, Los Angeles, California.

### Wednesdays Sessions

On Wednesday morning the group proceeded to the Experimental Farm of the United States Department of Agriculture, Bureau of Dairy Industry at Beltsville, Maryland.

Here the various problems under investigation by the Bureau were illustrated and discussed. Some of the problems included, among others, the open shed versus closed barn housing of cattle; methods of watering cows; box stalls vs. stanchions; effect of frequency of milking; test vs. herd conditions; comparative value of feeds; practical application of feeding standards; feeding calves with a minimum of milk; comparison of pasture crops; silage crops, yield and feeding value; influence of various factors on the percentage of fat in milk, etc.

Unfortunately the prevalence of a heavy rain storm prevented the presentation of the cattle in the open, to demonstrate these various subjects. However the trip was of exceptional interest to the visitors, who learned of the field and scope of the work of this department.

Joint Session with the Agricultural Section of the

United States Chamber of Commerce. The group attended a joint luncheon meeting with the Agricultural Section of the Chamber of Commerce of the United States, at the Mayflower Hotel, Washington, D. C., on Wednesday May 9th, 1928.

The general subject of the session was "Teamwork in Agriculture."

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## Sixth Annual Meeting Penna. Dairy Ass'n

(Continued from page 1)

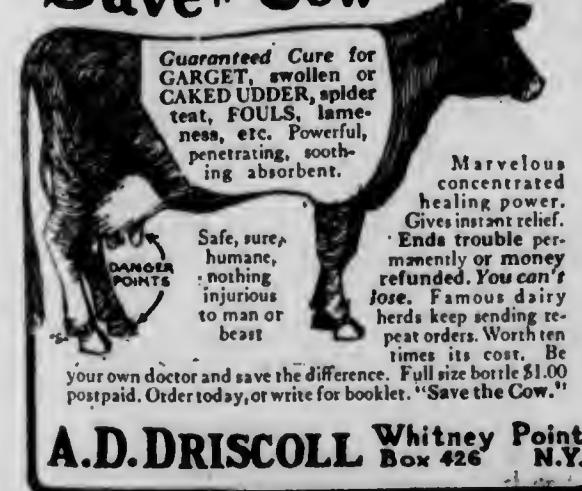
Jersey Cattle, Champions and Breed Champions: T. B. Whittaker, Sheffield; F. F. Breeland, Hatfield; F. H. Ross, Handing Hall; J. S. Hummer, Vreeland, Hatfield; Second, T. B. Whittaker, Sheffield; Third, J. S. Hummer, Titusville.

Grand Champion all Breeds: A. G. Danks, State College, Pa. Winners Showing Contest: First, A. S. Forest, Pittsburgh; Second, E. H. Phillips, State College; Third, W. M. Markle, West Newton; Fourth, S. P. Williams, Philadelphia and Fifth, H. A. Berge, Lewisburg.

As a closing feature, the Penn State Chapter of the American Dairy Science Association held its annual banquet on May 5th, at the Methodist Church. At this banquet addresses were made by E. S. Bayard, Editor of the National Stockman and Farmer. Dr. S. W. Fletcher, Vice Dean and Director of Agricultural Research, State College, Dean R. L. Watts, of the College of Agriculture.

M. A. Farrell, president of the Penn State Chapter, acted as toastmaster.

## "Save a Cow"



## Relation of Concrete to Clean Milk Production

(Continued from page 2)

fall into rapid decay on account of the constant moisture to which it must necessarily be subjected, and which will provide an absolutely clean and sanitary place in which the milk is to be prepared for market. These requirements can only be met by the extensive use of concrete in every part of the milk house. The walls, floors and cooling tanks made of concrete can be thoroughly scrubbed and disinfected daily.

Bacteriologists state that the multiplication of bacteria on account of improper cooling contributes more bacteria than the source of contamination. We can see that an ice house is a necessary and economical structure in the production of clean milk. In the building of the ice house the insulation of the walls is the most important factor to be considered. Can this be secured better by any other method than by the use of concrete blocks? A sloping concrete floor provides the best drainage possible for this building.

The customary practice of making wasteful and unsightly piles of manure outside of the barn door can be economically corrected by the construction of a concrete manure pit, which will prevent animals from passing through the manure, and will conserve a valuable fertilizer. The loss of which from leaching alone amounts to millions of dollars annually. The construction of a concrete manure pit will remove a source of contamination and will greatly aid in the production of clean milk.

In fact there is no part of the dairy farm which does not lend itself to the extensive use of concrete. It contributes to the production of clean milk in that it



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is economical and sanitary. It is economical because of its durability and its practically indestructible permanency. It is sanitary and contributes mightily to the production of clean milk in that it offers a building material that does not harbor germs and can be easily cleansed and disinfected.

\*First Prize Contest Essay, awarded to M. A. Farrell, at the Sixth Annual Penn State Dairy Exposition, by the Portland Cement Association.

## BABY CHICKS

Order now for June delivery.

Rhode Island Red Chicks, \$12 per 100; Barred Rockers, \$12 per 100; White Leg-horn Chicks, \$9 per 100; Ducks 30c each; 25 or more 25c each. Good straight stock, guaranteed delivery.

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Look to the De Laval Milker for Better Records and Cleaner Milk



A view of the clean, modern dairy buildings at the Highland Guernsey Farm, noted Certified dairy, owned by Mr. Roy C. Kinsey, at Roanoke, Va.

## Certified Guernsey Dairy Had Average Count of 6226 With Hand Milking—1952 With De Laval

**A**LITTLE over a year ago the Highland Guernsey Farm, owned by Mr. Roy C. Kinsey, at Roanoke, Va., installed the De Laval Milker which, they had become convinced, offered them a more sanitary method of milking, a means of saving valuable time and labor, and better milking for their herd of splendid high-producing Guernseys.

The De Laval has been in daily service ever since and it has been found very satisfactory in every respect. Bacteria counts for the year averaged 1952. The previous year, with hand milking, the average was 6226. These figures speak for themselves and offer a concrete example of the fact that the De Laval does produce cleaner milk.

Mr. Kinsey also reports that they do not have a bad udder in the barn. The gentle, uniform action and correct milking of the De Laval Milker keep teats and udders in a vigorous, healthy condition and eliminate the possibility of injury to the cow caused by careless or poor hand milkers.

Write today for complete information, or if you prefer, ask to have a De Laval representative call. No obligation of any sort.

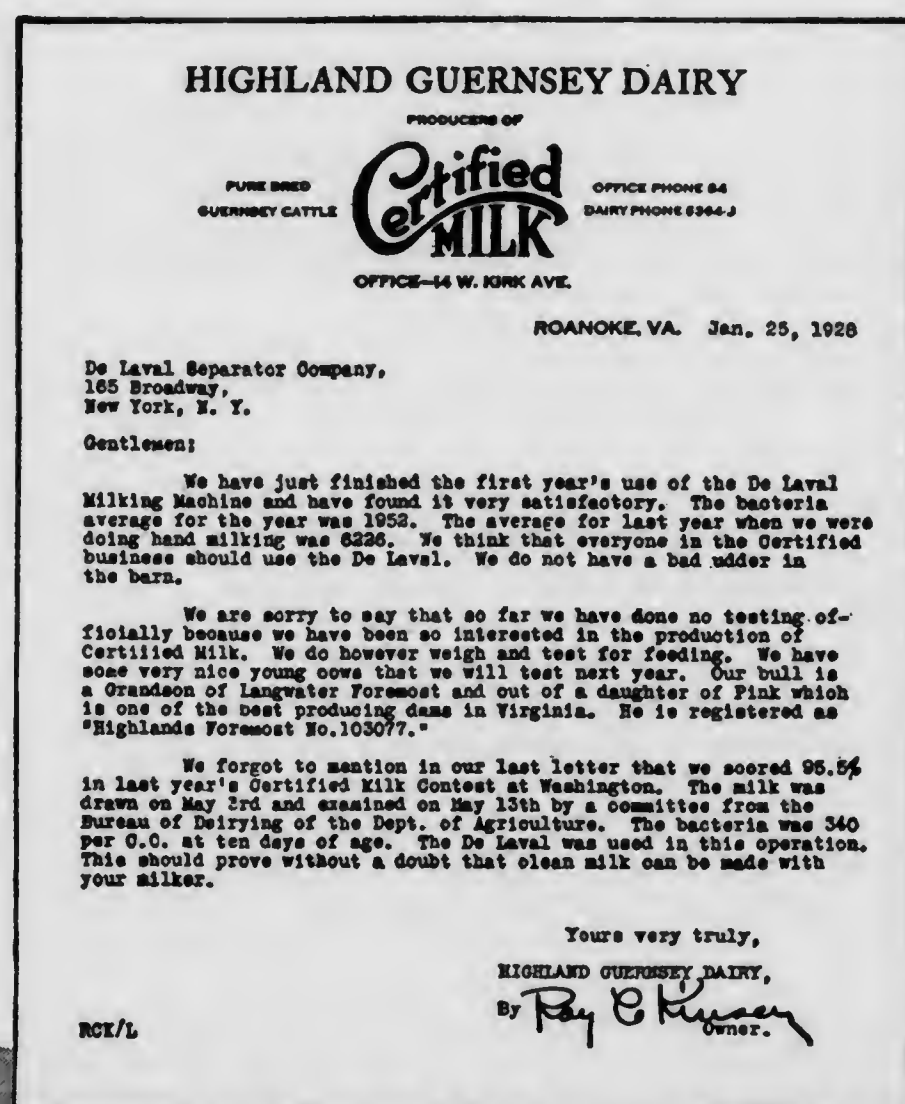
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Below is a facsimile of a letter recently received from Mr. Kinsey, setting forth the results of the first year of De Laval milking.



# Milk Producers' Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMERS

Volume IX

(West Chester, Pa., and Philadelphia, Pa., July, 1928)

ATION, Inc.

No. 3

## THE 1929 PHILADELPHIA SELLING PLAN WITH DETAILED EXPLANATIONS

By H. D. ALLEBACH

### INTER-STATE SELLING PLAN Effective October 1, 1928

Memorandum of Conference held June 5, 1928, revising memoranda of previous conferences held October 3, 1921, September 8, 1926 and June 22, 1927.

Milk will be sold as heretofore, in the following classifications:  
Basic, First Surplus and Second Surplus Under Such Conditions as Are Hereinafter Defined

#### Established Basic Quantity

Producers shall receive each month, basic price for their "Established Basic Quantity" as hereinafter defined.

#### Basic Price

The basic price will be established, as heretofore, by conference.

#### METHOD OF DETERMINING ESTABLISHED BASIC QUANTITY

The established basic quantity of each producer during the first nine months of 1928 shall continue to be his established basic quantity during October, November and December, 1928.

**ILLUSTRATION**—Mr. Brown and Mr. Smith both have basic averages of 3500 pounds on which they are being paid during 1928. Anything above that amount will be paid for at the surplus price during October, November and December 1928 just as in the previous months. One class of surplus only will prevail during those three months.

**EXAMPLE**—October, November, December, 1928.

4400 lbs.—Production of Mr. Brown in Oct., Nov. or Dec., 1928.

3500 lbs.—Basic quantity of Mr. Brown in 1928.

900 lbs.—Amount of surplus milk of Mr. Brown for Oct., Nov. or Dec., 1928.

#### OR

2700 lbs.—Production of Mr. Smith for Oct., Nov. or Dec., 1928.

3500 lbs.—Basic quantity of Mr. Smith.

No milk of Mr. Smith paid for at surplus price for October, November or December, 1928.

The following provisions shall apply in determining basic quantities under the Inter-State Selling Plan to be used during 1929.

#### Old Shippers

The basic quantity of each old producer to be used during 1929 shall be established by adding together the three following items and dividing the sum thereof by three:

1. Established basic quantity used for 1927 payments.
2. Average production made in Oct., Nov. and Dec., 1927.
3. Average production made in Oct., Nov. and Dec., 1928.

**ILLUSTRATION**—Mr. Brown has a basic average of 3500 pounds for 1927. His average production during October, November and December 1927 was 4000 pounds. His average production during October, November and December 1928 will be 4400 pounds.

**EXAMPLE**—for 1929 basic.

3500 lbs.—Established basic for 1927.

4000 lbs.—Average production during Oct., Nov. and Dec., 1927.

4400 lbs.—Average production during Oct., Nov. and Dec., 1928.

3)11900

3967 lbs.—New basic quantity for 1929.

Mr. Smith has a basic average of 3500 pounds for 1927. His average production for October, November and December 1927 was 3000 pounds. His average production in October, November and December 1928 will be 2750 pounds.

**EXAMPLE**—for 1929 basic.

3500 lbs.—Established basic for 1927.

3000 lbs.—Average production during Oct., Nov. and Dec., 1927.

2750 lbs.—Average production during Oct., Nov. and Dec., 1928.

3)9250

3083 lbs.—New basic quantity for 1929.

#### Old Shippers Without 1927 Basic Quantities

The basic quantity for 1929 of any producer having no established basic quantity for 1927 payments, shall be determined by adding together the three following items and dividing the sum thereof by three:

1. Established basic quantities for 1928 payments.
2. Established basic quantities for 1928 payments.
3. Average production made in Oct., Nov. and Dec., 1928.

**ILLUSTRATION**—Mr. Jackson had no established basic quantity in 1927. For 1928 he was paid on a basic quantity of 4000 pounds. His average production during Oct., Nov. and Dec., 1928 will be 4900 pounds.

**EXAMPLE**—For 1929 basic.

4000 lbs.—Established basic quantity for 1928.

4000 lbs.—Established basic quantity for 1928.

4900 lbs.—Average production during Oct., Nov. and Dec., 1928.

3)12900

4300 lbs.—New basic quantity for 1929.

(Continued on page 3)

was added the average made in October, November and December 1927. The sum of these two amounts was divided by two and the amount of that division established the 1928 basic average.

This method, we found, did not increase the total average basic quantity very greatly and it was believed that it was satisfactory to most of our producers.

In developing these plans, which we felt would be fair to the producer and to the consumer and distributor, we hoped to be able to maintain our present basic price and, if possible, have it continue unchanged over a long period.

This year we have developed and agreed upon a plan which will establish the producers basic average on a basis of three years average production. This includes the average basic amount on which the producer was paid during 1927, the average basic amount made in October, November and December 1927, and the average basic amount made in October, November and December 1928. The sum of these three amounts is divided by three to arrive at the basic average for 1929.

This program, herein outlined will, we believe, retard producers in increasing their basic quantity during October, November and December 1928, and should a large amount be produced, but one third of the amount will enter into the calculation of the actual basic average. This three year basic program also gives a producer, who has, in any one year had a poor basic average, the opportunity of equalizing this poor year, with two other better production years.

This entire plan is laid down with the idea that it will aid the regular producer—one who has been operating his dairy on a regular productive basis, year after year and not for the purpose of benefiting irregular producers, particularly such farmers who make milk when the market is good and who frequently, by this practice, flood the market.

With the maintenance of the present program, we see no reason why the present price range should not continue in force. Price is unquestionably a matter of supply and demand and unless we inordinately increase supply or unless something unforeseen should occur, our market looks comparatively stable.

You will also note that we have in this plan, endeavored to take care of the producer who, by reason of the losses due to the tuberculin test, has not been able to equalize production and take advantage of his usual production for the establishment of a true basic average. These apply in cases where the initial tuberculin test was made in 1927 or 1928, while provisions are also made for the new producer during the fall of 1928 and in 1929.

If there should be any details, not covered by this presentation of the plan write the secretary of the association and state your problem briefly. Every effort will be made to explain any details of the plan by the various association representatives.



## Relationship Between the Milk Producer and the Milk Dealer\*

By CLYDE L. KING, Ph.D., University of Pennsylvania

Milk producers sell and milk dealers buy milk. The immediate relationship is, therefore, one of seller and buyer.

If the farmer produced his milk from weeds and cornstalks and if the dealer sold his product to the denizens of a blue moon, the relationship would be simple and of little concern.

But the case is not so simple. The dealer sells to a consumer, an earthly consumer who has many other wants, many standards, and the usual human measure of fancies, whims, stereotyped ideas, and health needs. The producer has alternatives as to what he may do with his time and with his capital. So while the dealer buys from the farmer and sells to the consumer, the producer has a direct interest in the price the consumer pays, and in the consumer's needs, beliefs, and ideas about his product. For those needs, beliefs, ideas, even fancies, constitute the demand for what he has to sell. And the demand for the product affects the farmer's price. This is true whether this dealer in the middle sells wholemilk or any of the products of milk.

### The Law of Supply and Demand

"But the law of supply and demand fixes prices and neither the farmer nor the dealer can do anything about it." This is a statement that represents the point of view of the old school of pessimistic economics. If we believe that, we should stop all advertising, pull down all billboards, and stop all farm meetings in which production is discussed.

But the factors in both supply and demand are largely man-made. And being man-made, we can do something about them. Moreover, the factors all vary and can be changed. Whether anything coming out of a relationship where the factors are so tractable as in both supply and demand can be called a law, we need not stop here to discuss. But rather let us list some of the factors in supply and demand and then ask how well directed human endeavors are changing and may change those factors. In this relation of conscious human effort as applied to each of the factors making up supply and demand, we will find the vital relationships between those who produce milk and those who distribute milk and its products.

Milk producers have alternatives as to what they will do with their land, their equipment, and their labor. To be sure some may be so situated as to market or as to natural advantages that they would continue to produce milk at a price that would bankrupt others not so situated. But a sufficient number of producers in any given territory will have alternatives sufficient to measurably increase or decrease the supply of milk. The extreme alternative is to abandon the farm and seek employment either in industrial establishments or in farms with better native advantages, or with better market facilities. Or the decision may be to stay on the same farm but to produce other commodities. And nowadays in any one of these decisions knowledge, spread through conscious endeavor, helps make the decision.

### Some Illustrations

To just what crop is a given piece of land best suited? Some of the facts essential to an answer to this question have to do with the chemical analysis of the soil. Some have to do with principles

### I. Some Factors Influencing the Supply of Milk:

The Factors	What the Individual Producer May Do	What Producers or Milk Dealers or Both May Do Cooperatively	What the Community or Government May Do
Winter weather too severe.	Protection from cold in modern barns; possibly choice of breeds of cattle.	Organize the transportation and delivery of milk to help meet these problems.	Keep channels of transportation open.
Summer weather too hot.	Shade trees or sheds for cattle; proper cooling of milk.	Collecting and cooling stations for cooling milk; facilities for handling.	Adequate refrigeration in transportation.
Land too wet.	Tilling of fields; improved methods of cultivation.	Cooperative drainage; expert advice; technical knowledge.	Community drainage or levees where area is large.
Land too dry.	Irrigation; frequent cultivation; adaptation of crops.	Technical assistance.	Irrigation reservoirs; experiment stations for testing methods, seeds, and crops.
Lands depleted in certain elements essential to growth of animal or vegetable life.	Lime, phosphorus, nitrogen, iodine or other needs can be supplied.	Practical guidance and advice.	Experimental and extension work in land utilization.
Motive of land ownership absent.	Thrift.	Cooperative finance; cooperation in getting necessary legislation.	Land and credit legislation.
Labor not skilled in dairy methods or dairy sanitation.	Each farmer can learn the facts and teach them to his help.	Producers' organizations can send out trained advisers.	Short-term agricultural schools; expert advice.
Special pests.	Prevention methods such as crop rotation; use of poisons.	Technical advice and, if necessary, special aid.	Quarantine; research in experiment stations as to preventive methods.
Widespread disease such as tuberculosis or contagious abortion or foot and mouth disease.	Isolation of infected animals; care in purchasing.	Technical aid and securing cooperation of public authorities.	Quarantine; indemnity funds; technical knowledge.
Small output per cow.	Selection of cows and sires; records of individual cows.	Credit associations; co-operative associations; bull associations; dissemination of information as to what the best farmers are doing.	Investigation of essential factors and their dissemination; sponsoring club activities.
Wages too high.	Use of power machinery and labor saving devices.	Cooperation with public authorities in training help or in establishing special schools.	Changes in immigration laws.
Living standards on farm too low.	Seek other occupations or turn to other uses of land; labor and capital; improved methods to lower unit costs and hence increase unit profits.	Educate the consuming public as to the facts among farmers as compared with other industrial groups.	Tariff policies; credit policies; favorable laws as to cooperative buying and selling.
Inadequate transportation facilities.	Adapt containers and farm deliveries to new or better methods.	Secure cheaper and better transportation through co-operative hauling so as to get volume; ask for rate adjustments.	Railroad rate policies; water transportation facilities; better public highways.
Too much milk produced.	Increase unit profits but lower total output.	Price policies that will tie into national and international markets.	Education of both rural and city consumers as to the food value of milk.
Consumer unimformed as to relative food value of milk at stated prices.	The occasional consumer will inquire as to the facts; the average consumer will buy as habits direct.	Educational campaigns leading directly to the consumer and also fixing consumption habits and standards among school children.	A people whose mental standards are dependent on the vitamins found in milk may well afford to put money into the education of consumptive standards.
Milk does not look good nor taste good.	Buy the best the market offers; do not talk much about the worst; refuse bad milk.	Improved sanitation, refrigeration and care from cow to consumer; build up cream line.	Inculcate national standards as to consumptive habits so that milk is "approved" as a beverage.
Belief that pasteurizing milk harms it.	Consult one's physician or dietitian.	Disseminate information as to the health reasons for pasteurization.	Spread health standards among physicians and consumers.
Supply of milk undependable.	Keep demand constant.	Stabilize production by price plans.	Essential changes in transportation tariff or other public policies.
Fear that milk may be carrier of disease.	Demand pasteurization.	Improve sanitation on farm and in plant.	Pasteurization laws and ordinances.
Racial or provincial prejudice against milk.	Be open-minded as to facts.	Dramatize the need.	Adult and child education.
Low buying power in community; low wages.	Enhance skill; prove dependability; migrate; help emphasize to employer the community value of higher wages.	Join in policies that will encourage the earning power best suited to the community.	Community encouragement; changes in public policies.
Seasonal variation in price to consumer sufficient to lower consumption habits.	Be ready to approve cooperative efforts.	Stabilize price through basic and surplus plans; encourage production in seasons of low production and discourage it in seasons of high production.	Aid in creating the public opinion that will sustain stabilized price plans; encourage stable production; legislation when necessary.

of crop rotation. Some depend upon the market. Some depend upon the skill and knowledge existing in the community. Some may have to do with suburban values. Some—the most important—deal with whether schools are at hand and with the religious traditions of the farmers. Some may have to do with breaking down age-old traditions as to methods. Some may have to do with choice of seeds or of plants. What soil bacteria can be made to thrive? Can the soil be drained or irrigated? Is labor dear or cheap? These are but a few of the factors determining whether pasture and feeds for milk cows can profitably be produced on a given farm at a given price. The factors involved are not adumant, unless as to native soil ingredients; and something can be done by man even about these. The factors all yield to the growing science of soil use and to the growing mobility of producers to new methods and new facts.

I have listed in the adjoining table just a few of the factors influencing the supply of and demand for milk. I have also given briefly some steps that may be taken to influence each of these factors through conscious policies. The list is incomplete, necessarily, as time and space forbid even an attempt at an exhaustive list.

I have tried to divide these factors into those influencing demand and those influencing supply. I have tried also to classify the factors that can be influenced by individual action and those that can be influenced mainly by co-operative action and those that can be influenced by community or public action. This distribution soon gets into borderlands where the distinctions disappear. That only points to the close human relationships in all these matters. (See chart.)

Merely naming the factors that influence the supply or demand for milk and listing what may be done about them emphasizes at once how difficult these factors are of individual control and how easy they are of co-operative guidance. No one producer can materially affect the supply of milk. No one consumer can drink so much milk as to make any measurable change in total demand. Nor can any one dealer, however large, materially change either production or consumption though he can do so to a greater extent than can any single producer or consumer because of the larger quantity he handles. Put producers acting together, or dealers acting together, or consumers acting together can change substantially either supply or demand as they may set out to do. And all three acting together may produce results in the best interests of all. Only by co-operative effort may those results be produced. The interests in common are far greater than the differences.

### What the Producers May Do Through Cooperation

Producers in the first place can make a fair bargain possible by co-operative selling. When buyers are few and sellers are many, the sellers are at a disadvantage. The haggling of the market out of which comes price equilibrium assumes power both to sell and to withhold. Farmers acting one by one can not effectively exercise the power to sell or to hold. That is true of any

(Continued on page 6)

## The 1929 Philadelphia Selling Plan

(Continued from page 1)

### Initial Tuberculin Test 1927

Any producer whose cows underwent an initial test for tuberculosis during the year 1927 and who elected to be paid during 1928 on a basis of the established basic quantity for 1927, shall for 1929 receive an established basic quantity as follows: Add together the three following items and divide the sum thereof by three:

1. Established basic quantity used for 1927 payments.
2. Established basic quantity used for 1927 payments.
3. Average production made in Oct., Nov. and Dec., 1928.

**ILLUSTRATION**—Mr. Davidson had his herd tested for tuberculosis for the first time in 1927 and elected to continue the use of his established basic quantity for 1927 during the year 1928. During October, November and December 1928 his average production will be 7497 pounds.

**EXAMPLE**—For 1929 basic.

- 6345 lbs.—Established basic quantity for 1927.
- 6345 lbs.—Established basic quantity for 1927.
- 7494 lbs.—Average production during Oct., Nov. and Dec., 1928.

3)20184 lbs.

6728 lbs.—New basic quantity for 1929.

### Initial Tuberculin Test 1928

Any producer whose cows undergo an initial test for tuberculosis during the year 1928 may elect to have used as his established basic quantity during 1929 either, first, the basic quantity used during 1928 or, second, the established basic quantity determined in accordance with the provision governing "old shippers."

**ILLUSTRATION**—Mr. Jones had his herd tested for tuberculosis for the first time during 1928. His established basic quantity for 1928 had been 7000 pounds. Because of this tuberculin test his production during October, November and December 1928 falls to only 4000 pounds. He is entitled to keep his 1928 basic quantity for use during 1929.

Mr. Jones may elect to keep the 7000 pound basic quantity for use during 1929.

If on the other hand Mr. Jones has an average production above 7000 pounds during October, November and December 1928 he may elect to have his basic quantity for 1929 determined in accordance with the first illustration under "OLD SHIPPERS."

Mr. Jones or any other shipper whose herd has had the initial test for tuberculosis in 1928 should notify the Inter-State Milk Producers' Association, Inc., that he desires to keep his 1928 basic for use during 1929 or his basic for 1929 will be figured as in the case under "OLD SHIPPERS."

### New Producers from January 1, 1928 to September 30, 1928

Any producer starting to ship on or after January 1, 1928, establishing a basic quantity on a basis of 50% of the first thirty days' shipment or any other basic not above 70% of same, shall during October, November and December, 1928, receive basic price for 70% of his production in each of those three months. His established basic quantity for 1929 shall be 70% of the average daily production made in October, November and December, 1928.

**ILLUSTRATION**—Mr. White began shipping during the early months of 1928. His shipments for the first thirty days were 8000 pounds. He received an established basic quantity for the balance of 1928 of 50%, of this thirty day shipment, or 4000 pounds. On October first his basis of payment will automatically change to 70% basic and 30% surplus of each month's shipment during October, November and December, 1928.

**EXAMPLE**—For 1929 basic.

- 10,000 lbs. Oct. 70% Basic or 7000 lbs.—30% Surplus or 3000 lbs.
- 9,000 lbs. Nov. 70% Basic or 6300 lbs.—30% Surplus or 2700 lbs.
- 11,000 lbs. Dec. 70% Basic or 7700 lbs.—30% Surplus or 3300 lbs.

3)21000

7000 lbs.—New basic quantity for 1929.

### New Producers After October 1, 1928 Until December 31, 1928

Any producer starting to ship on or after October 1, 1928 and prior to January 1, 1929, shall during October, November and December, 1928, receive basic price for 70% of his production in each of those three months. His established basic quantity for 1929 shall be 70% of the average daily production made in October, November and December, 1928, computed by taking the sum of his daily shipments dividing same by the number of days shipping and multiplying the quotient by thirty.

**ILLUSTRATION**—Mr. Miller began shipping on November 16th, 1928. His shipments for November and December were paid for as follows:

**EXAMPLE**—For 1929 basic.

- 4000 lbs. Nov. 16-30—70% Basic or 2800 lbs. 30% Surplus or 1200 lbs.
- 8000 lbs. Dec. —70% Basic or 5600 lbs. 30% Surplus or 2400 lbs.

12000

46)12000 lbs.—Total shipment 46 days.

260.9 lbs. multiplied by 70% equals 182.6 lbs. average daily basic shipment. 182.6 multiplied by 30 days equals 5478 pounds.

5478 lbs.—New Basic Quantity for 1929.

### New Producers January 1, 1929 and Until Further Notice

Any producer starting to ship after January 1, 1929 shall establish a basic quantity on a basis of 50% of his first thirty days' shipment.

**ILLUSTRATION**—Mr. Harris began shipping January 5, 1929. From January 5 to February 4, he shipped 7200 pounds.

**EXAMPLE**—For 1929 basic.

7200 lbs.—January 5, to February 4 (30 days).

50%

3600 lbs. equals 50% first thirty days' shipment.

This represents his basic quantity for 1929 for each month's shipment until further notice.

### Surplus Quantities

During the first six months of the year each producer is to receive the first surplus price for that portion of his production in excess of his "Established Basic Quantity" up to an amount equal to his "Established Basic Quantity;" and second surplus price for all milk in excess of his first surplus quantity. During the last six months of the year he is to receive first surplus price for all milk produced in excess of his "Established Basic Quantity."

### First Surplus Price

The first surplus price shall be established by the following method:

1. Determine the average price of 92 score solid packed butter at New York City, by adding all daily quotations between the 28th of the previous month, and the 27th of the current month and divide this sum by the number of quotations included.
2. Multiply this average butter price by four and to this figure add 20 percent of the same. The result will be the price of first surplus milk of four percent butterfat content at all receiving stations at railroad points. To determine the price of direct shipped surplus milk, add \$.5755 per hundred pounds to cover usual differentials for freight, receiving station charges, etc.

### Second Surplus Price Quantity

Each producer, during the first six months of the year, is to receive second surplus price for all monthly production, if any, in excess of the sum of his "Established Basic Quantity" and the first surplus quantity. This provision does not apply during the last six months of the year, during which period each producer is to receive first surplus price for all milk in excess of his "Established Basic Quantity."

### Second Surplus Price

Second surplus price is to be determined by the method outlined for first surplus price except that the 20 percent is not to be added.

### Removals

In case of tenants changing from one farm to another, or farm owners selling out and purchasing a farm elsewhere, and who, by this procedure, change buyers of their milk, it is definitely understood that the basic quantity established goes with the cows.

### Special Cases

Special cases where one or more producers change to new buyers are open to agreement between such producers, buyers and the Inter-State Milk Producers' Association.

A committee of two, one representing the producers and one representing the buyers, shall be charged with the duty of making the computations of the surplus prices each month. They shall immediately announce the result of their computations to all parties concerned.

The usual butterfat differential of four cents for each one-tenth point, and two cents for each one-half-tenth point of butterfat, shall apply to both classes of surplus milk as well as to basic milk.

This memorandum covers all points in the territory. Any of the parties interested reserves the right to ask for a conference with respect thereto at any time.

### Outlines Research Program for Dairy Industry

Outlining a program of economic research for the dairy industry, F. A. Buechel, Department of Agricultural Economist, addressing the American Dairy Science Association at Madison, Wisconsin, June 26, declared that the general objective of such a program is to aid in lowering costs of production, adjusting production to present and prospective market requirements, developing a more efficient system of marketing and distribution, and in expanding outlets for dairy products.

"Although the dairy industry," he said, "is perhaps the most stable of all agricultural enterprises, periods of relative prosperity in this industry as in other agricultural activities frequently contain the germs for their own ultimate undoing. The relatively high prices which have prevailed for dairy products in this country in recent years will naturally tend to bring various competitive forces into play which may, if not recognized and counteracted, result in an early termination of the present favorable conditions. High prices of dairy products in this country may stimulate excessive expansion of the industry; it may tend to reduce per capita consumption, or it may lead to the importation of dairy products from other countries, especially if the prices in Europe should become relatively low."

Mr. Buechel's program of dairy research would include comprehensive studies of the economic history and geography of the dairy industry; farm organization and methods in dairy regions; the physical movement of specific dairy products from areas of production to centers of consumption; wholesale price-making mechanism for butter and cheese; quantitative analyses for determining and measuring the factors which influence the price and supply of and the demand for butter, cheese, fluid milk and concentrated milk; and qualitative studies by the survey method of consumer habits and preferences with respect to dairy products.



## INTER-STATE MILK PRODUCERS' REVIEW

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In preparing and presenting its selling program to its members for 1929, the Inter-State Milk Producers' Association, the Directors and Officers believe that they have developed a plan which will stabilize production so as to meet the probable demand and at the same time lend stability to the market.

The provisions of the plan are announced at this early date so that producers will have ample time to adjust their production to meet the demands of the market and adjust production to a sound and economic basis.

The Philadelphia Selling Plan for 1929 is outlined on the first page of this issue of the Milk Producers' Review. Detailed explanations of the various features of the plan are given in what is believed to be understandable language. Every producer should study this plan and be governed by its conditions.

The 1929 Philadelphia Selling Plan is believed to be fair to the producer, fair to the consumer and fair to the distributor. It is one which, we believe will hold marketing conditions stable for a long period.

The farm crop production season is now going ahead quite rapidly, following a backward spring and a surplus rain fall, together with continued cool weather.

Pasture and hay crops have been advancing rapidly and while late in maturing, have been quite abundant. Corn crops, planted mostly under favorable conditions, have made a good growth for the season of the year.

Wheat harvests are well under way in most sections in this territory and the general outlook for an abundant crop is favorable.

Taken all in all the small grain crops look well and prospects pending favorable weather conditions, look good.

Milk production, retarded in the spring months in some sections of the Philadelphia Milk Shed, due to a large extent to short pastures, is increasing, along with the present better weather conditions.

The same general improvement in weather conditions should also result in increased consumption, particularly in the case of fluid milk and ice cream.

### National Dairy Exposition

Plans are under way to make the 1928 National Dairy Exposition at Memphis, Tennessee, one of the best that has ever been held. It will be held on the State Fair Grounds in connection with the

Tri-State Fair and National Cotton Show, on October 13th to 20th, 1928.

Elaborate plans are being made to house these three shows. A new judging pavilion, 250 feet long, with liberal seating capacity is to be erected for this year's show.

Plans are also under way for the holding of important national conferences and meetings. The National Milk Producers' Federation is planning sessions as is also the National Dairy Council. In addition to the awards for show cattle, student judging and 4-H Club work will be interesting events during the time of the show.

### Dairymen's League

#### Elects New President

Fred H. Sexauer of Auburn, N. Y., was elected president of the Dairymen's League Cooperative Association, Inc., at the annual electing meeting of the Board of Directors held June 22 following the annual membership meeting the previous day. He succeeds G. W. Slocum of Milton, Pa., who has been president since 1920. Mr. Slocum announced a month ago that he would not be a candidate for reelection because of failing health.

Mr. Sexauer has been a director of the League since December 9, 1919, and a member of the Executive Committee since December 14, 1921.

Other officers, all of whom were re-elected, are: J. D. Miller of Susquehanna, Pa., first vice president; J. D. Beardslee, Bainbridge, N. Y., second vice president; J. A. Coulter, Watertown, N. Y., secretary, and Chester Young, Napanoch, N. Y., treasurer.

### Congress Adopts Stamp Tax Exemption for Cooperatives

The new Internal Revenue Bill passed by the Congress contains an amendment exempting cooperative associations from paying a stamp tax on stocks, bonds and certificates of indebtedness issued by them.

This amendment was introduced by Senator Shipstead of Minnesota at the request of the National Cooperative Milk Producers' Federation. It passed the Senate and was accepted by the House.

This was one of the many nuisance taxes held over from previous Internal Revenue Bills. The Washington Herald estimates that this amendment will save the cooperatives of the country 3½ million dollars annually. So far as we know, it was the only tax reduction directly affecting agriculture embodied in the new revenue legislation.

### Report of the Field and Test Department Inter-State Milk Producers' Association.

The following statistics show the aggregate operations of all the Inter-State Milk Producers' Association field men in connection with testing, weighing and general membership work, for the month of May, 1928.

No. Tests Made	7091
No. Plants Investigated	91
No. Membership Calls	397
No. New Members	
Signed	141
No. Cows Signed	971
No. Transfers Made	41
No. Meetings Attended	6
No. Attending Meetings	1070

## Market Conditions

H. D. ALLEBACH

Market conditions during the past month have not been as favorable to consumption as we would have liked. The wet and cold weather has had quite an effect on the consumption which did not increase as much as we had hoped it would. On the other hand this weather was very favorable to production. Under these conditions we find the buyers of milk with a considerable surplus. This time it seems to have hit the small dealers a little harder than the larger ones and they are having quite a bit of difficulty taking care of their supply.

We also find that the labor situation has not improved as a whole. If anything it has become worse in some sections than it was during May.

These conditions again call to our attention the fact that every producer should be very careful not to increase his supply at this time and should not think of adding any additional cows to his herd but rather to dispose of any boarder cows he might have.

With the high price of feed, high price of milk cows and existing market conditions, we do not believe it would be a paying proposition to add many fresh cattle to your herd.

Our statistical records show that during the month of May the Inter-State Milk Producers' Association handled 52,551,517 pounds of milk. This represents a decrease of 2,195,197 pounds over that of May one year ago and an increase of 7,665,461 pounds over that of April.

### June Milk Prices

Grade B market milk, three per cent butter fat content (basic quantity average), delivered f. o. b. Philadelphia, during June is quoted at \$3.29 per hundred pounds.

The price of basic milk (basic quantity average) three per cent butterfat content, delivered at Receiving Stations in the 51-60 mile zone, during June, is quoted at \$2.71 per hundred pounds. The usual butter fat differentials and freight rate variations applying at other

mileage points in the territory, are shown by quotations on page 5, of this issue of the Milk Producers' Review.

The price of Class I surplus milk, for June, three per cent butter fat content, at all Receiving Stations, is \$1.69 per hundred pounds. For f. o. b. Philadelphia delivery the price for Class I surplus milk is quoted at \$2.26 per hundred pounds or 4.85 cents per quart.

The price of Class II surplus milk, for June, three per cent butter fat content, at all Receiving Stations, is \$1.33 per hundred pounds. For f. o. b. Philadelphia delivery the price of Class II surplus milk is quoted at \$1.91 per hundred pounds or 4.1 cents per quart.

### June Butter Prices

Fluctuations in prices during the past month have been fractionable. The market has exhibited a somewhat nervous condition and there has been much hesitancy in the general movement. Prices have been a trifle higher than at this time last year and there has been some speculation as to whether the price was low enough to begin storage. Some little higher price butter has already gone into storage.

Storage holdings have been generally increasing, but on the whole have not kept pace with the records of the previous year. Cold storage holdings at the four markets on June 12th showed 16,020,000 pounds on hand as compared to 25,404,000 pounds, a year ago. This shortage of 9,384,000 pounds was less than was anticipated.

Prices of 92 score butter, solid packed, New York City opened the month at 43½ cents—there was a fractional advance to 44 with a high of 44½ at mid-month. Prices then slowed off to 44 cents, rising later in fractional amounts to 44½ cents and finally closed at 44c at the end of the month.

The average price of 92 score butter solid packed, New York City, on which the June surplus price was computed was 4409 cents a pound, as compared to 4506 cents a pound in May and 4255 cents a pound one year ago.

### Enormous Farm

#### Fire Losses Present

#### Problem for Study

Approximately \$150,000,000 worth of property is destroyed each year by farm fires. This does not take into account possible waste of foodstuffs or of labor. Among the most important causes are spontaneous ignition of hay, grain, feeds, and other agricultural products; lightning; defective chimneys and heating outfits; and sparks on combustible roofs; other causes include carelessness in handling matches or in smoking; carelessness in using and storing gasoline and kerosene; and faulty electrical wiring. In connection with the spontaneous ignition of hay stored in farm buildings, such material inundated by the notable Vermont floods heated rapidly after the water receded, one barn which stood in 5 feet of water burning only three days after the flood.

This spontaneous heating of hay and other products will be one of the first problems considered by the Bureau of Chemistry and Soils, United States Department of Agriculture, which is making a study of ways and means of preventing this huge loss. Cooperating with the department specialists are various prominent insurance and fire-protection organizations.

### Pennsylvania Leads in Ice Cream Making

"Pennsylvania leads all states in both ice cream production and per capita consumption," says Fred Rasmussen, former head of the dairy department of the Pennsylvania State College and now executive secretary of the International Association of Ice Cream Manufacturers.

Today the Keystone state manufactures over 50,000,000 gallons of ice cream annually, which represents one-seventh of the total output in the United States. Likewise, the per capita consumption of ice cream in the state is five gallons compared to slightly less than three gallons for the entire country.

Rasmussen reports that Pennsylvania was the first state to have an ice cream factory. This was located at Seven Valleys, York county, and started making ice cream in 1852.

From this small beginning the industry has developed until there are 4500 factories in the whole country, representing an investment of approximately \$450,000,000. The annual production increased from 100,000,000 gallons in 1910 to over 322,000,000 gallons in 1926. To supply the milk products for this favorite national dish the product of 1,000,000 cows is required.

## LATEST MARKET PRICES

### PHILADELPHIA SELLING PLAN

The basic price, quoted below for June, 1928, is to be paid by cooperating dealers on the average basic quantity established by each producer. For all milk bought in excess of the basic amount, the surplus prices, quoted below for the month of June are to be paid. Surplus milk will be paid for under two classifications. Class I, represented by the amount of milk in excess of the basic average and equal to it in amount, which will be paid for by cooperating dealers on the basis of 92 score butter, solid pack, New York City, plus 20 per cent and Class II surplus represented by milk shipped in excess of the first surplus amount, which will be paid for on a flat average 92 score butter price for the month. The following quotations are based on 3 per cent butterfat content milk and a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down, and are for all railroad points. (Inland stations carry differentials subject to local arrangements).

### INTER-STATE MILK PRODUCERS' ASSOCIATION PRICES

This price list is issued with the understanding that it is not to be producers and that all buyers using it as a basis of payment to producers, shall in addition thereto make the following contributions and payments:

(1) To the Philadelphia Inter-State Dairy Council 2c per 100 pounds (16½ quarts) of all milk purchased from any producer at prices listed hereon.

(2) To the Inter-State Milk Producers' Association 2c per 100 pounds (16½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2c per 100 pounds (16½ quarts) of all milk bought from other producers at prices listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed, for improvements and stabilization of markets and for an educational campaign advertising the food value of dairy products.

### BASIC PRICE

#### June F. O. B. Philadelphia

#### Grade B Market Milk

Test per cent.	Per 100 lbs.	Price per qt.
3.05	\$3.29	7.1
3.1	3.31	7.15
3.15	3.35	7.2
3.2	3.37	7.25
3.25	3.39	7.3
3.3	3.41	7.35
3.35	3.43	7.4
3.4	3.45	7.45
3.45	3.47	7.45
3.5	3.49	7.5
3.55	3.51	7.55
3.6	3.53	7.6
3.65	3.55	7.65
3.7	3.57	7.65
3.75	3.59	7.7
3.8	3.61	7.75
3.85	3.63	7.8
3.9	3.65	7.85
3.95	3.67	7.9
4	3.69	7.95
4.05	3.71	8
4.1	3.73	8
4.15	3.75	8.05
4.2	3.77	8.1
4.25	3.79	8.15
4.3	3.81	8.2
4.35	3.83	8.25
4.4	3.85	8.3
4.45	3.87	8.3
4.5	3.89	8.35
4.55	3.91	8.4
4.6	3.93	8.45
4.65	3.95	8.5
4.7	3.97	8.55
4.75	3.99	8.6
4.8	4.01	8.65
4.85	4.03	8.65
4.9	4.05	8.7
4.95	4.07	8.75
5	4.09	8.8

When milk is not tested the price f. o. b. Philadelphia is 8 cents per quart.

### JUNE SURPLUS PRICES

#### F. O. B. Philadelphia

Test per cent.	Per 100 lbs.	Per 100 lbs.	Per 100 lbs.
3.05	\$2.26	\$1.91	\$1.41
3.1	2.28	1.93	1.45
3.15	2.30	1.95	1.45
3.2	2.32	1.97	1.45
3.25	2.34	1.99	1.45
3.3	2.36	2.01	1.45
3.35	2.38	2.03	1.45
3.4	2.40	2.05	1.45
3.45	2.42	2.07	1.45
3.5	2.44	2.09	1.45
3.55	2.46	2.11	1.45
3.6	2.48	2.13	1.45
3.65	2.50	2.15	1.45
3.7	2.52	2.17	1.45
3.75	2.54	2.19	1.45
3.8	2.56	2.21	1.45
3.85	2.58	2.23	1.45
3.9	2.60	2.25	1.45
3.95	2.62	2.27	1.45
4	2.64	2.29	1.45
4.05	2.66	2.31	1.45
4.1	2.68	2.33	1.45
4.15	2.70	2.35	1.45
4.2	2.72	2.37	1.45
4.25	2.74	2.39	1.45
4.3	2.76	2.41	1.45
4.35	2.78	2.43	1.45
4.4	2.80	2.45	1.45
4.45	2.82	2.47	1.45
4.5	2.84	2.49	1.45
4.55	2.86	2.51	1.45
4.6	2.88	2.53	1.45
4.65	2.90	2.55	1.45
4.7	2.92	2.57	1.45
4.75	2.94	2.59	1.45
4.8	2.96	2.61	1.45
4.85	2.98	2.63	1.45
4.9	3.00	2.65	1.45
4.95	3.02	2.67	1.45
5	3.04	2.69	1.45
	3.06	2.71	1.45

### MONTHLY SURPLUS PRICES

#### 4% at all Receiving Stations

Month	Class I	Class II
May 1927	2.07	1.72
June	2.01	1.67
July	1.98	1.67
August	1.97	1.67
September	1.97	1.67
October	2.30	1.80
November	2.34	1.77
December	2.46	1.73
January 1928	2.34	1.94
February	2.21	1.83
March	2.35	1.96
April	2.17	1.80
May	2.13	1.77
June	2.09	1.73

### BASIC PRICE

#### June Grade B Market Milk

Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.

Prices are less freight and receiving station charges.

Freight Rates 100 lbs.

Price 3/4 milk

1 to 10 incl. 2.68

11 to 20 " 2.72

21 to 30 " 2.75

31 to 40 " 2.78

41 to 50 " 2.82

51 to 60 " 2.85

61 to 70 " 2.89

71 to 80 " 2.94

81 to 90 " 2.97

91 to 100 " 2.99

101 to 110 " 3.04

111 to 120 " 3.07

121 to 130 " 3.12

131 to 140 " 3.15

141 to 150 " 3.18

151 to 160 " 3.22

161 to 170 " 3.25

171 to 180 " 3.28

181 to 190 " 3.31

191 to 200 " 3.35

201 to 210 " 3.38

211 to 220 " 3.42

221 to 230 " 3.45

231 to 240 " 3.48

241 to 250 " 3.52

251 to 260 " 3.55

261 to 270 " 3.58

271 to 280 " 3.62

281 to 290 " 3.65

291 to 300 " 3.68

301 to 310 " 3.72

311 to 320 " 3.75

321 to 330 " 3.78

331 to 340 " 3.82

341 to 350 " 3.85

351 to 360 " 3.88

361 to 370 " 3.92

371 to 380 " 3.95

381 to 390 " 3.98

391 to 400 " 4.02

401 to 410 " 4.05

411 to 420 " 4.08

421 to 430 " 4.12

431 to 440 " 4.15

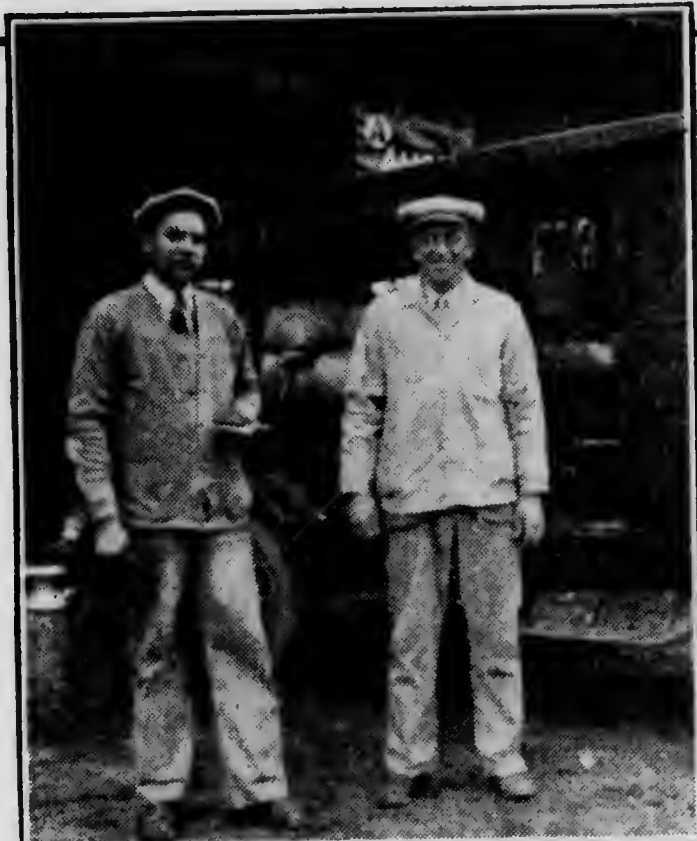
441 to 450 " 4.18



# a VERMONT dairyman / / / / a NEW HAMPSHIRE dairyman "O.K."

## AMCO 20% DAIRY

M. E. REYNOLDS operates a big dairy farm and milk route at West Lebanon, N. H., milking approximately 26 cows. His homestead and barn are shown at the right. Including AMCO 20% DAIRY to his milking cows and AMCO FITTING RATION to his dry cows and heifers, he feeds three to four bags of AMCO OPEN FORMULA FEEDS daily. Mr. Reynolds says, "Previous to using AMCO 20% DAIRY, I was feeding a carefully mixed home ration. About a week after switching on to AMCO 20% DAIRY, the cows had shown a gain of 12 quarts per day for the herd, and I found that I was feeding less by weight of AMCO 20% DAIRY than I was of the home mixture."



Mr. Reynolds (right) getting a load of AMCO FEED at the Amco Service Store, West Lebanon, N. H. He saves \$1.00 a ton by taking it from the car. (left) H. H. Rogers, Store Manager.



S. D. WRIGHT at White River Jct., Vermont, has a beautiful purebred herd of some thirty Jerseys. Along with silage and good hay, he feeds AMCO 20% DAIRY to his milking cows, and AMCO FITTING RATION to his dry cows and heifers. Mr. Wright says, "I am very well pleased with results and your price is certainly mighty fair."



Mr. Wright and 2 of his good Amco-fed Jerseys

On good pasture feed  
AMCO 18% DAIRY  
On short pasture feed  
AMCO 20% DAIRY

**AMCO**  
FEED MIXING SERVICE  
AMERICAN MILLING COMPANY  
EXECUTIVE OFFICES: PEORIA, ILL.  
DIVISION OFFICE: MUNCY, PA.

Plants at:  
Peoria, Ill.; Omaha, Neb.;  
Owensboro, Ky.

Alfalfa Plants at:  
Powell, Garland, and  
Worland, Wyo.

## Relationship Between the Milk Producer and the Milk Dealer

(Continued from page 2)

farm product but it is peculiarly true of a perishable product such as milk. For with fluid milk the power to withhold is the power to find at once an alternate market, or to change output over a substantial period only. It is of the power to take one's eggs back home and chuck them in water glass for three months. Selling cooperatively means to sell with equal bargaining power. And no dealer and no consumer can find additional objections to such a bargain. Indeed, it is in the long time interest of both to assure just such a bargain.

### What the Dealers Can Gain by Cooperation

Some buyers may well argue that the evils of cooperative selling may overcome its advantages. Such buyers point to instances of advertisements paid for by selling cooperatives attacking the milk dealer in a way prejudicial to milk consumption. They may point to publicity solicited by such cooperatives with the intent of harming the business of milk buyers. They may point to the efforts of such cooperatives to undersell the very dealer who is handling their products. Such evils have existed. It would take us too far afield to inquire in each instance to what extent these methods have been inspired if not made necessary by the tactics of the dealers themselves. But whatever their cause they are seldom if ever worth the price. Their use can not be denied so long as the spirit and effort of cooperation are wanting. But granted a joint cooperative effort, and such methods of course can find no justification. He who wants to sell his product dare not destroy his market.

The buyers then must face the possibilities of abuse of cooperative selling just as farmers single handed must face the possibilities of abuse of large-scale buying.

What may the dealer expect to gain by accepting the risk incident to dealing with adequately organized producers?

The dealer can first of all expect rational market knowledge to take the place of irrational bargaining methods. Wherever organized selling must accept its responsibilities, its representatives learn that the abuse of selling power can prove a powerful boomerang. A price higher than market facts warranted has broken down about as many cooperative selling organizations as too low a price has created.

Having made up their minds to bargain, cooperative sellers and cooperating buyers must needs next know their facts. Out of the very necessities of informed and open selling has come a growing call for market knowledge. These facts—price factors whether in supply or demand—can be reasonably ascertained and on the basis of those market facts prices can be rationally agreed upon. Out of such facts come the science of buying and of selling—the science of marketing.

**The Mobility of Stable Price Factors**  
We have already listed some of the factors determining the supply and demand for milk. The essential characteristic of each of these factors is its stable character. The other essential characteristic is that each is subject to conscious change.

Let me illustrate. Ignorance of the food value of milk as compared with other foods at given prices is a factor that is stable. It doesn't change until

somebody changes it. But it can be changed. Methods adopted to change ignorance into knowledge must simply be as big as the job. A good advertising campaign may in one week increase current consumption 10%. I have seen that done. But that 10% is hard to keep. And it is harder still to get the next two per cent. To get that result, consumption habits of old and young must be changed. And the most difficult of educational tasks is that involved in changing habits. No single individual can expect to change them materially. But cooperative effort can and does.

The habits and traditions in handling milk cows play an important part in milk production. Such habits and traditions are not easily changed. But they can be changed. The size of the job requires cooperative effort to get appreciable results.

Just because price factors are relatively stable future prices can be established. And just because these factors can be changed, however slowly, it pays to make prices cooperatively.

Both dealers and farmers have much to gain therefore, first by organized cooperative selling, then by cooperatively buying, and then by joint efforts to change in a way favorable to the best long time interests of the industry practically all the factors entering into supply and demand.

And not the least of the advantages to both is an open price. Cooperative selling must have a known and open price. There can be no lasting negotiations unless all concerned are in on the negotiations. A known and open price tells the producer exactly what he may expect. And he may plan his herds accordingly. An open price puts competition on a known basis with both buyer and seller interested in maintaining them. Competition is better informed and hence fairer even though keener, particularly as to quality and as to service.

### What the Consumer May Gain Through Cooperative Effort

The consumer wants a wholesome quality of milk or its products at a price that will maintain production on that quality basis. Consumers have tried the boycott. They have, through health officials, sometimes tried the big stick. Neither has worked. What the consumer wants in quality it takes time to produce.

A consumer does not want milk for her children that is a carrier of disease. It is penny wise and pound foolish to save by buying unsanitary milk and then pay out large sums in doctor's bills and in human suffering. No farmer the world round knowingly prefers to sell disease. The interests are in common. They must meet on a common price ground fair to all.

The methods necessary to improve the sanitary conditions surrounding milk can best be adopted through cooperative endeavor. The will to do comes first and that means mutual understanding.

A good quality of milk free from contamination at an equitable price is brought to the consumer by cooperative effort and by cooperative effort alone.

The producer, the middleman, the consumer have interests in common that are greater than their differences, and the common interests can be put to the

(Continued on page 10)

## National Dairy Council Holds Summer Session

The National Dairy Council, together with its Regional units held its customary summer session at Buffalo, New York, on June 11th, 12th and 13th, 1928, which proved of exceptional interest to every one attending it.

These summer sessions embody a general business conference, the consideration of plans and programs for future development and for the general outlining of policies.

This session was attended by representatives from the National organization and secretaries and representatives from the various Regional units, and was under the direction of M. D. Munn, president and Dr. C. W. Larson, managing director of the National Council.

The first day's meeting was given over, largely, to the discussion of general conditions by the secretaries of the various Regional units and by detailed consideration of immediate and future plans for educational work, including educational plans, leaflets, posters, exhibit material and motion pictures.

The morning meeting on June 12th was largely devoted to the presentation of educational Dramatics under the direction of Del Rose Macan, Dramatic Director of the Philadelphia Inter-State Dairy Council. "Story Telling" was the subject of an address by Miss Mona McWilliams, of the New England Dairy and Food Council. The following monologues and plays were presented by various members of the Philadelphia Inter-State Dairy Council—"Prince Hansa" (for 5th and 6th grade school classes); "Pioneer Pages" (for 7th and 9th grades); "Pirate Story" (for Junior High Schools); "Listening In" (for Junior High and Adults); "Interior Decorating" (for Adult groups).

The afternoon and evening sessions of this day were given over to addresses by members of various groups, including the following—"Health Education in Physical Education"—Dr. Charles H. Keene, Prof. of Hygiene, University of Buffalo, Buffalo, New York; "The Ways in Which Voluntary Organizations Can Supplement Organized Health Education Programs"—Miss Mary E. Spencer, Health Educational Specialist, National Catholic Welfare Conference, Washington, D. C.; "Dry Milk in Institutional Cooking"—Dr. H. E. Van Norman, Pres. Dry Milk Institute, Chicago, Illinois; "The Magic of Milk"—Professor Happy, Writer and Lecturer, New York City; "The Trend of Health Education"—Miss Sally Lucas Jean, Health Education Consultant, New York City; "Greetings from American Health Association"—Dr. W. W. Peter, Associate Secretary, American Public Health Association; "Illustrated Talk on the Council Organization and How it Helps the Dairy Industry"—Prof. W. P. B. Luckwood, New England Dairy and Food Council, Boston, Mass.

The final day's meeting of the session was divided into group work. There was a business session by the National Council and the secretaries of the various Regional units, a meeting for the general discussion of publicity methods and material through the local newspapers, trade journals, school papers and house organizations, and a general session for the women workers of both the National Council and Regional units.

Uncle Ab says that knowing what not to say is likely to be worth more than knowing what to say.

## Recent Developments in Manure Spreaders

Advances in agricultural are not made alone by engineers and specialists. There is much latent talent on the farm waiting to be brought into action, and such action usually comes with sledge-hammer force. Such was the case with Edward C. F. Schaefer of R.F.D. 3, York, Pa. This progressive farmer was seeking some means of lessening the labor and uniformly increasing the fertility of his soil so that he might receive the highest yields per acre.

This farmer found it difficult to keep down the bacteria count in his milk unless he kept the cow stable in a most sanitary and inviting condition. He decided to clean his stable each morning and groom his cows as carefully as he did his horses. Manure began to pile up in the barnyard and besides becoming a breeding place for flies, offered other dangers and affected losses he could not well afford. He purchased a manure spreader and the cleanliness sought was obtained.

This experience led to other observations not unusual with live-wire farmers. In applying the manure direct from the stables he observed that very much better results were obtained and he was enabled to cover more acres with the same amount of stock kept on the farm. He reasoned that a light top dressing for wheat or grass was better than a heavy application to be plowed down and that he would cover more acres, reaching all his tillable land in a 3-year rotation. He obtained the full strength of the Nitrogen, Phosphoric Acid and Potash. No loss resulted from fermentation, decay and leaching; the minerals were in their most soluble form, and he received the full humus value. Results: less labor, cleaner stables and greater returns from his farm.

This manner of handling the farm operations brought out another vital point in building up his soil. He discovered that his manure spreader would not produce an even distribution over the entire acreage. While the pulverizing beaters were clean and free from wrapping, the distribution was even but the wrapping seemed unavoidable. This was his next problem. He reasoned that if the teeth of these pulverizing beaters were given a withdrawing motion the centrifugal force would always keep the bars and teeth clean.

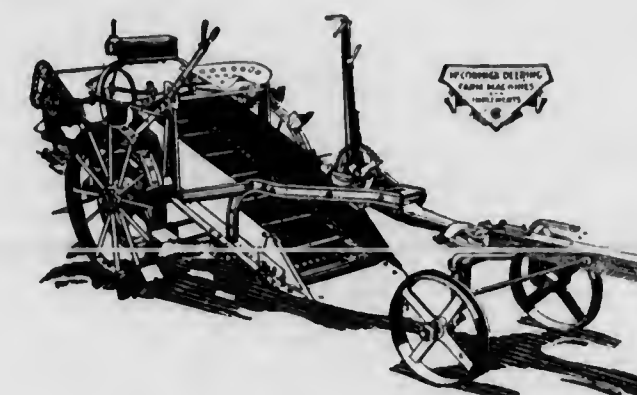
After months of experimenting, as his time permitted, he developed the positive "Non-Wrap" beaters and placed them on his spreader. The tooth-bars were made to oscillate on the beater; the teeth strike the feeding stream in a parallel position, lifting for an instant and then tearing and pulverizing and delivering to the distributor. He called in his neighbor friends who helped to make the most severe tests and today the "Non-Wrap" Manure Spreader makes an even distribution whether he applies a light top dressing of four loads or the heaviest application of twenty-four loads per acre.

This invention of Mr. Schaefer's will enable farmers to increase the uniform fertility of their soil and consequently by the means of producing maximum crops, as a spreader embodying this patented device is already in production by one of the oldest and largest manufacturers of Farm Implements.

The "Non-Wrap" beater, has proven its effectiveness in twenty tests and demonstrations in Lancaster, Lebanon,

## McCormick-Deering Potato Diggers

For Better Potatoes and More of Them



THE McCORMICK-DEERING Digger has become popular because of its light draft, and because of the clean compact rows in which it leaves the potatoes—making them easy to gather.

It increases the potato-growers profits because it gets all of the potatoes, whole and unbruised. Two and four horse sizes. Parts for attaching an engine to the drive elevator can be supplied.

## International Harvester Company of America

Philadelphia

Harrisburg

Baltimore

## FARQUHAR "NON-WRAP" MANURE SPREADER

UNIFORMLY INCREASES SOIL FERTILITY

Because of its

## Even Distribution

This is a new, tested and thoroughly dependable Spreader built for the widest possible use. The "Non-Wrap" features were invented by a York County farmer and used by him for three years. It positively makes an even distribution of all kinds and conditions of manure. Beaters cannot wrap, therefore even spread in quantities from 4 to 24 loads per acre. Has large bed and exceptionally easy draft.

The All-Steel Frame with channel sides makes a stronger and more rigid bed frame. Both beater shafts are mounted in self-aligning roller bearings. Front axle has great flexibility; cleated and flanged, ground wheels, automobile steering and the oscillating tooth bars are distinctive features.

Write today for information.

A. B. FARQUHAR CO., Limited, Box 961, YORK, PA.

Ask about our Rural and Suburban deep and shallow Well Water Systems. Save the good wife many hours of drudgery at very small cost.

Cumberland, Adams, Franklin and York counties, in Pennsylvania. When assisted by a 16-point pulverizer, it will produce an even distribution no matter what kind or the condition of the manure.

Mention the Review When Writing Advertisers





### Are You Willing That Your Child Should Have Diphtheria?

You are doubtless carrying fire insurance on your house and barn, theft insurance on your automobile and accident insurance on yourself. What are you doing to insure the life of your children against diphtheria?

When one stops to think that in 1890, 41,677 children in the United States died from diphtheria, and even as late as 1923, that 11,733 lives were lost from this same cause, an understanding is gained of the reason why the very mention of this dreaded disease arouses an instinctive fear.

Today, all over the country, parents are using the opportunity offered by school doctors, clinics, state health and private physicians to have their children protected against diphtheria by immunization. This safeguard is obtained by injecting, under the skin of the arm, three small doses, one each week for three weeks, a specially prepared material which enables the body to build up a protection against diphtheria. This toxin-antitoxin should not be confused with the antitoxin which is used in large doses to cure or produce a temporary immunity to the disease in persons already exposed to diphtheria.

The ages between six months and six years is the danger period. Older children and adults, as well as babies under six months, are apt to have a natural protection.

It is possible for anyone in almost all communities to learn whether or not he or she is susceptible to diphtheria by the simple means of the Schick test. Any person showing this susceptibility should at once be given the toxin.

"Both the test and treatment are safe," say all State Boards of Health. Children usually experience little or no discomfort from the toxin-antitoxin, the reaction being not even as severe as that following typhoid vaccination. Nor is there any fear as in the smallpox vaccination.

It usually takes the body from eight to twelve weeks to build up a complete protection after the treatment. A final Schick test should be made three or more months after the toxin-antitoxin treatment to definitely determine whether or not immunity has been secured. Once complete immunity has been reached, with rare exceptions, it appears to last through life.

The wide use of toxin-antitoxin has shown marvellous results in reducing the death rate from diphtheria. Statistics of the Metropolitan Life Insurance Company show that the general use of this means of immunization in twenty-three representative American cities has resulted in an average decline of 10.3 per cent of cases per year.

Don't "hope" your child will not have diphtheria. Instead, know that he is insured against the disease. If you wait until you hear of a case in the community, your own child may have already been exposed and it may be too late to create immunity and thus prevent the development of diphtheria.

"Yesterday is gone, tomorrow never arrives, and today"—begin to take out diphtheria insurance in your family.

### Using Your Fruit for Desserts

Desserts are always an added bit of work for "someone." The summer months lighten this duty by bringing fresh fruits at our very door. At no other season of the year does the dessert problem become such a simple one or such a healthy one.

It is the dessert that leaves the last pleasant taste of the meal and fills the last empty nook. Therefore, it must be good to the last drop.

What could be better than a dish of chilled fruit which has been seasoning in the ice box since being prepared in the morning. There are many delicious combinations which one can concoct. No matter what "concoction" you make, remember that one really acid fruit will bring out the best flavor of all the other fruits used.

#### Stuffed Peaches

Peel large fresh peaches. Cut a slice from the top and remove the pits with-

out breaking the fruit. Then fill the peach with any chopped fruit. Grapes, dates, and nuts are good. Top it with sweetened flavored whipped cream.

#### Meringued Fears

6 pears 3 egg whites  
6 T. sugar 1 c. powdered sugar  
grated lemon rind

Place pears in baking dish, fill centers with 1 tbsp. sugar, a little grated lemon rind. Add 3 or 4 tbsp. of water and bake until tender. Cover with meringue made with stiffly beaten whites of eggs and sugar. Brown quickly.

#### Raspberry Whip

1 c. fruit pulp 1 c. whipped cream  
Sugar to taste Salt  
3 egg whites

Rub the fruit through a strainer, add a little salt, sugar if necessary. Then fold in the egg whites or whipped cream. Serve cold.

### That Meeting at the School House

Again the telephone was ringing. Mrs. Deemster had had several calls that morning and the work was not getting done very rapidly, so she went slowly hoping no more interruptions would come until—but Mrs. McGee was saying, "We missed you last night at the Parent-Teachers' meeting."

David was to go to school for the first time this year. The mother was all anxiety about this venture of her first born. Morning work was all forgotten for she was hearing something like this—"We decided to try to have every child entering school for the first time next September, looked over by our good expert mechanic, Dr. Brown, who has done so much for all our children. I knew you would want to bring David. We were told such astounding facts that every one was anxious to do this. Eighty per cent of all children are born physically well, but by the time they get into the public schools about 5% have tuberculosis; about 5% have deficient hearing; 15 to 25% have diseased tonsils and adenoids; 10 to 25% have orthopedic defects; 50 to 75% have defective teeth and 15 to 25% are victims of malnutrition."

"Our doctor, our dentist and oculist are all coming next week, to look them over, then if anything is wrong we will have the summer months to have it righted. We know how careful our husbands are about having the automobiles looked over before going out on a long trip—or a short one. Our children are starting a long trip with a year in school ahead of them and it is wise to have them looked over in this way."

"Where did this start?"  
"With the National Parent-Teachers' Association who called it the Summer Round Up. Nothing has seemed so popular. Every organization wants to help and can help."

It is such a fine opportunity to learn many things that puzzle mothers. Here the doctor, nurse and mother sit down together with the child and freely discuss the needs for this particular child. In this way the mother sees just what the doctor sees, has her attention called to little things she had not noticed.

This not only saves time for the school officials but for those children who go on with their school work without the strain of physical defects. The defect easiest of correction is defective vision, the most difficult, hardness of hearing. The most common defect is bad teeth.

Flat feet have been treated more or less as a joke, but to the young man or woman who must be on their feet at work all day it is no joke. A noted foot specialist says that in his private practice more than one out of every three who come to him are children with flat feet. A very simple test any mother can make for information here is to grease the feet with vasoline, then stand them on blotting paper. Only impress of the toes, ball of the foot and heel should show. If the entire foot or inner border shows your child needs attention, but this can be easily remedied by right shoes and simple pads—if you have the advice of an orthopedist.

Eighty per cent of our babies are born healthy. Adult life finds them with 80% handicapped.

Is not this a challenge to every mother?

### Young Farmers' Week and Farmers' Day at Penn State College

Two gatherings, set aside each summer by the officials of the Pennsylvania State College, have proven of exceptional interest to the farmers of that state—Young Farmers' Week and Farmers' Day—which held their meetings at the college on June 12 to 14 inclusive and June 14th and 15th of this year.

Each year there has been a large and enthusiastic attendance—and this year proved to be no exception. Hundreds of young farmers attended the various programs of the session. The Young Farmers met with County Agents, Vocational school teachers, 4H club and other leaders. There were judging contests of various kinds, inspections of the various agricultural features of the college, addresses were made by leading educators and numerous entertaining features were added. Prof. Happy Goldsmith, of the Philadelphia Inter-State Dairy Council made an address at one of the evening sessions on the value of good health.

On Thursday evening the Farmers' Day sessions began with addresses by Dr. R. W. Hetzel, president of State College, who welcomed and greeted the visitors. Talks were also made by Miles Horst, representing the Agricultural Council of Pennsylvania; Hon. R. C. Bressler, Deputy Secretary of Agriculture for Pennsylvania, and Fred. Brenkman, National Grange Representative at Washington, D. C., as well as brief remarks by other speakers.

Friday's session was given over to a group of some fifty odd addresses touching on the various phases of agriculture. Four addresses were made in connection with dairying. Prof. J. F. Shigley, of Penn State, made an address on Dairy Animal Diseases including contagious abortion, garget, calf scours, etc., C. I. Colver, Director of the Quality Control Department, Philadelphia Inter-State Dairy Council, made an address on "Getting the Highest Price for Milk." H. Fohrman, United States Department of Agriculture, spoke on "Bringing Up the Dairy Herd for Milk and Butter Fat Production," while G. I. Bechdel addressed the gathering on "What is New in Dairy Cattle Feeding."

In addition to these addresses on dairy subjects others of a similar character were made in connection with grain, fruit, vegetables, fertilizer, beef cattle, sheep, farm implements, soil fertility and countless other problems of every day interest to the farmer.

Visits were made to the dairy barns, creamery and dairy production sections, various experimental fields and plots, orchards, gardens, where the various addresses partook of a practical demonstration, of exceptional value to the farmers attending. Poultry, beef cattle, hog, baby beef, horses and all came in for their share of attention and those who attended had every opportunity to get in touch with the latest practices, as they have been developed from a practical as well as theoretical standpoint.

Announcement of the winners in the judging contests during Young Farmers' week have been announced as follows:

Jefferson county won the swine judging contest for both club members and vocational students. Three boys on the Jefferson team, Charles Hickman, Donald Stahlman, and Clyde Raybuch, were the three highest individuals.

In the 4-H club poultry contest the high teams were Wayne, Perry, Cumberland, and Blair. Gorge Schroder, of

## Keep it high through the Whole Pasture Season

**Now** is the time to do something about that summer milk slump. There's a Purina Chow made to fit your own local pasture conditions and to keep your milk production high all season.

If your pasture is green and high in protein, feed Orange Checker Cow Chow. If your pasture has started to dry a bit and lose some of its protein, go back to Green Checker Cow Chow. The right Purina Chow will get you increased production on grass this year, *without the slump*.

When you're ordering Purina at the checkerboard store, be sure to get the right one for your own pasture conditions.

PURINA MILLS, 854 Gratiot Street, St. Louis, Mo.  
*Eight Busy Mills Located for Service*

Write us for a Purina Cow Booklet—free

### Bathe Your Baby in Sunshine

Sun baths should be part of a baby's daily routine for every ray of sunshine holds a ray of health.

This sunshine contains the invisible ultra violet rays which are so beneficial to babies and growing children. Unfortunately, these rays cannot pass through ordinary window glass or clothing. For their full benefit one must come out in the "great out of doors."

During the summer months, the rays are the strongest and most valuable between the morning hours of eight to eleven o'clock.

All babies need the sun to help their growth and to build up resistance against diseases. Sunshine plays an especially important part in the prevention of the dreaded diseases—rickets and tuberculosis.

The baby's crib or carriage is a convenient place in which to give the daily sun bath, as it may be rolled out of doors with little trouble.

Exposure to the direct sun must be gradual as too much sunning may prove harmful. The skin of the child should tan but not burn or blister.

the winning team, was high individual scorer. Vocational teams placing highest were Greene, Westmoreland, Bradford, Crawford, and Montgomery. Gordon English, of Tioga county, was high scoring individual.

In the club livestock contests the Mercer county team was first with Cumberland, Clarion, and Cambria placing in the order named. Elmer Lesnett and Dwight Pringle, of the winning team, were first and second in individual scores. The highest team in the vocational contest was Westmoreland county.

Other high teams were Liberty, Troy, Unionville, and Huntingdon Mills. Charles Ballard, Troy, was high scorer. Cumberland county won the club dairy cattle judging contest with Lebanon, Clearfield, Mercer, and Bucks teams following. Leon Quick, of Rush, Susquehanna county, was the individual winner. First place in the vocational contest was won by the Spartansburg school, with Berryburg, Unionville, Cambridge Springs, and Corsica next in line. Robert Burdick, of Cambridge Springs, was the highest scorer.

**Philadelphia Inter-State Dairy Council, Inc.**  
General Offices  
219 N. Broad St., Philadelphia  
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## Cool Milk

below  
50°

Are you going to keep up your profits during the hot summer months? Are you going to earn the premiums paid for milk that's clean, cold and wholesome?

ESCO—the new Milk Cooling Cabinet—cools your milk to below 50 degrees, quickly, economically and efficiently. Operated with electric refrigeration. Controlled automatically. Designed especially for cooling milk on the dairy farm.



ESCO Cabinet Co.,  
West Chester, Pa.  
Please send full details  
about the ESCO Milk  
Cooling Cabinet for  
dairy farms.

Name .....

Address .....

I make.....cans of milk per day (2 milkings)

## Lime-Marl

is your best SOIL SWEETENER. More satisfactory and economical than any other form of lime. Acts quickly, is fully available, has no burning effects. Is fine and dry. Brings best results at least cost per acre.

Low in cost. Write for prices delivered your station.

**Natural Lime-Marl Co.,**  
ROANOKE, VA.  
(Two Plants on B. & O. Railroad)

## Dairy and Poultry Feeds

That Produce Results

Farm Supplies of all Kinds

Ask Us for Prices

**Scheideler Bros.**

LAWRENCE STA., N. J.

Phone 593

## Relationship Between the Milk Producer and the Milk Dealer\*

(Continued from page 6)

front to the mutual advantage of all by cooperative effort only. By cooperative effort I mean not sweetly singing the refrain and doing nothing but working at each and every force affecting supply or demand to the end that each force may be guided to its greatest good to the greatest number.

### Commodity Competition

Each economic epoch in the world's history has had its own form of competition. I think we are on the threshold of another epoch in competition. I believe the competition in the generation to come will be between commodities rather than primarily between individuals. It is to a large extent that already. The art of selling has wedded the art of cooperating marketing. The lumber folks join to advertise lumber and the steel folks unite to push the sale of steel. Apple growers tell us to eat an apple a day to keep the doctor away, and growers of raisins tell us to eat raisins to get the iron out of our systems need. The order of the day is cooperative selling, including cooperative advertising of commodities. Commodity producers join in securing good will for their product. Such is the new business way. And it has great social advantages in its favor.

But in such an era cooperation of all those concerned with a commodity from the first producer of raw material to the ultimate consumer must watch the wits of their representatives with the wits of the representatives of those selling other commodities.

Good roads and the automobile have put the cross roads merchant largely out of business and a new and greater shopping center has taken its place. Advertising is country wide in its appeal. And the world now lies before it. The World War taught new lessons as to how to get large numbers of people to act together and that art has reached the market place. He who stands against it loses his market. He who stands with it gains his market. And that means cooperative effort.

Out of market facts come prices and out of prices come new market facts. Prices are not the result of iron laws that bind the hands of endeavor and stifle the voice of social need. On the contrary price can be made: the expression of conscious direction of underlying economic and social forces, to the good of all concerned.

### Community Competition

Another change we have to learn to live with if we want our rightful place in the market, and that is that community competition is taking its place alongside commodity competition.

Far flung transportation systems of low cost and quick service are bringing community into competition with community as never before. No longer may advantages in natural gifts nor even local advantage of nearness to market be maintained or developed without touching public policies such as rail or water rates, or subsidies to merchant marines, or tariff policies, or public policies toward integration of business. The market place is no longer a side street in a province; rather is now between communities aided or retarded by public policies, and the world is the market.

Competition between individuals is then no longer the essential market fact. We now have competition between com-

modities strengthened by competition between communities.

Peoples compete with peoples.

In such a day and age who wants to stand alone? He who so prefers votes against cooperative effort. But he who wants his place in today's industrial Sun, will join in cooperative effort to get for his industry through self government the place that industry merits—a place it can get and keep by consciously directed, cooperative effort only.

### The Relationship Between Milk Producer and Milk Dealer

The present day relationship between milk dealer and milk producer is that of buyer and seller but in a new economic order. It starts with cooperative selling by producers that they may be on an equal bargaining basis with large buyers. It continues through the bargain as to the price the buyer shall pay to producer.

And then it proceeds to join hands to expand the market by better care of the milk from the cow to the cradle. It cooperates with consumers to get good will for the product. It takes its stand in the market to give milk as a commodity an equal chance with any other competing consumption demand. It adopts self-government in industry that government may be free for greater tasks of national, racial or community expression. It joins with government to get public policies that will give one community equal opportunities with others at least under similar conditions.

And all this done first for the local and then for the national market, the next relationship must be in the world market, where trade barriers must be so equalized that the best interests of all can in the end be maintained, while caring first for one's own.

He who milks his cow in the lowlands of Belgium or in the Highlands of Scotland, in the stables or in the islands of the far seas; he who works at a bottling plant in New York City or at a pasteurizing plant in London; he who earns his living in making cheese in Switzerland or butter in Australia; he who sells these products on the market and he who extends credit; must each lift his eyes to his market place which was once the nearby road crossing but is now the four corners of the globe. And unless he wants to have as little to do with his price as a minnow in the briny deep, he will join in cooperative efforts in the finest and best sense of that word.

\*Paper presented by Clyde L. King Ph.D., University of Pennsylvania, Philadelphia, Pa., at the World's Dairy Congress, June 28th, 1928, which Congress he attended as the representative of the Inter-State Milk Producers' Association.

### Spray for Profits

Be sure to spray your potatoes this summer. The practice is no longer experimental. Hundred of farmers have sprayed and experienced a comfortable filling of their pocketbooks as a result. It pays to protect a crop after it is planted so that the harvest will not be fruitless and disappointing.

Sixty years ago 480,000 acres was sown to wheat in Canada. Last year the wheat acreage of the Dominion passed the 21,000,000-acre mark. This year it is almost 22,000,000. Canada today leads the world in wheat exports, and actually exports as much as India, Australia, and Argentine combined.

## SAVE TWO YEARS ON YOUR COLLEGE COURSE

Earn State-Recognized College Degree  
Accounting Secretarial  
Commercial Teaching Bus. Executive  
Also Shorter Intensive Courses  
Good Positions for Graduates

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Tuberculin tested. Guernseys, Jerseys and Holsteins from accredited herds. Priced to sell. Carload lots a specialty.

**JACOB ZLOTKIN**  
Phone 330, FREEHOLD, N. J.  
"The Man Who Sells Good Cows"

## for feeding calves

Do you know that you can cut milk costs in half by adopting the "minimum milk method," using dry skim milk? Hundreds of dairymen who sell all their whole milk are making this big saving. They simply mix a pound of dry skim milk with a gallon of water, making a money-saving mixture which young calves thrive on. And they buy a pound of dry skim milk for half of what they receive for a gallon of whole milk. (1 gal. whole milk contains 1 lb. milk solids.)  
**AMERICAN DRY MILK INSTITUTE**  
160 North La Salle Street Room 720-6  
CHICAGO, ILLINOIS  
FREE Write today for "Better Calves" bulletin. State number of calves you feed. We'll tell you where to buy skim milk.  
Remixed—1 pound dry skim milk to 1 gallon of water—is also good for pigs and poultry

## CRUMB'S Chain Hanging STANCHIONS

Also Water Bowls  
Litter Carriers  
Feed Carriers  
Steel Stalls  
Steel Partitions  
I can SAVE MONEY for you. Send for booklet.  
**WALLACE B. CRUMB**  
Box 2, Forestville, Conn.

Lloyd S. Tenny, chief of the Bureau of Agricultural Economics, United States Department of Agriculture, has tendered his resignation, effective July 16th, and will accept an executive position with the Associated California Fruit Industries, Inc.

This association is an overhead organization controlled by growers designed to bring about coordinated action between growers and shippers interested in the distribution of both grapes and desirous fruits. The central unit in the organization is a clearing house, which, last year operated solely with fresh grapes under the California Vineyardist Association. The new extension of activities caused the change in name.

Ira L. Yoder, formerly associated with the Quality Control Department of the Philadelphia Inter-State Dairy Council, has resigned and has accepted a position as an assistant County Agent, with the Extension Department of Penn State College.

Uncle Ab says its good to travel, but it is better to know that you can find happiness wherever you are.

## Cold Storage Meat Supply

Larger Than Year Ago  
Larger cold storage stock of pork, lamb, and mutton than on June 1 a year ago, and a smaller supply of beef, poultry, creamery butter, and eggs are shown in the June 12 cold storage report issued by the Bureau of Agricultural Economics, United States Department of Agriculture.

The report places the supply of frozen pork at 290,513,000 pounds June 1st, compared with 211,742,000 pounds on June 1st a year ago. The quantity of dry salt pork fully cured at 98,532,000 pounds compared with 68,949,000 pounds on the same date a year ago; dry salt pork in process of cure at 70,980,000 pounds against 74,194,000 pounds last June. The supply of frozen beef in cold storage June 1 is reported at 21,018,000 pounds against 28,719,000 pounds a year ago, and frozen lamb and mutton at 1,235,000 pounds against 1,210,000 pounds last June. Lard stocks are reported at 185,579,000 pounds against 111,976,000 pounds on June 1, 1927.

Creamery butter stocks are placed at 16,020,000 pounds against 25,401,000 pounds a year ago; American cheese 36,803,000 pounds compared with 35,826,000 pounds, and case eggs 8,162,000 cases against 8,962,000 cases last June. Stocks of frozen poultry are reported at 43,915,000 pounds compared with 61,525,000 pounds a year ago.

There were 121,000 barrels of apples in storage June 1 compared with 229,000 barrels on June 1, 1927, and 1,211,000 boxes compared with 717,000 boxes.

## Report of the Quality Control Department Philadelphia Inter-State Dairy Council.

The following is a report of the work done by the Quality Control Department of the Dairy Council, for the month of May, 1928.

No. Inspections Made.....3970  
No. Meetings Held.....3  
Attendance.....625  
No. Miles Traveled.....25,370  
During the month 55 dairies were discontinued from selling for failure to comply with the regulations—64 dairies were reinstated before the month was up.  
To date 104,370 farm inspections have been made.

## Chicago Pure Milk Association

The Pure Milk Association of Chicago, Ill., organized about two years ago, now has a membership of about 4000. The Pure Milk Association is a collective bargaining association and has made rapid strides recently in perfecting its organization.

More than 600 dairymen already are members in Kane County, with prospects that this number will total 1000 in the very near future.

The association has the active support of the County Farm Bureaus in the 17 counties in which its members are located. In Wisconsin, the Wisconsin Council of Agriculture comprising all the major farm and dairy organizations in the state has pledged its support.

The 4000 members of the association are organized into 100 local units, which vary in membership from 25 to 275 dairymen. The association is active in all the southern tier counties of Wisconsin, in northern Illinois and in northwestern Indiana.



## HIGH-CLASS—LOW PRICED ORIOLE TUBULAR COOLER

Only \$34.50 for a 25 gallons per hour high pressure dairymen's tubular cooler.  
Only \$40.50 for a 50 gallons per hour size.  
Both sizes made entirely of copper and bronze. Copper tank and brackets furnished with every cooler. An Orile cooler will last a lifetime.  
Inspection free—order yours today, or write in for complete descriptive circular.

### CHERRY-BASSETT COMPANY

2324 Market St., Phila., Pa. or Russell & Ostend Sts., Balt., Md.

# NICE

THE NAME TO GO BY—WHEN YOU GO TO BUY  
**PAINT AND VARNISHES**  
Write for color Cards and Booklet "Paint Pointers"  
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Let Us Design Your Stationery

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**10 Day Test**  
Write today for descriptive literature and particulars of how Dr. Clark's PURITY Milk Strainers help you get Grade "A" test and more money for your milk.  
It is the only strainer made that's guaranteed to strain 100% clean. Our 10 Day Trial Test enables you to prove it at our risk—your money back if it fails to remove ALL the dirt. Thousands in use—two sizes 10 qt. and 18 qt. Sold by dealers everywhere. Dept. F5  
**PURITY STAMPING COMPANY**  
Battle Creek, Michigan



## High Grade Dairy Cows

in HIGHTSTOWN, N. J.

We handle all kinds of cattle

Holsteins — Guernseys — Jerseys

A Specialty

All cows tuberculin tested and sold subject to a 60 or 90 day retest and fully guaranteed in every respect.

Free delivery any distance

**B. ZAITZ & SON**

202 Mercer Street

Phone 72 Hightstown, N. J.

## Alfalfa Hay For Sale

New crop ready for shipment by July 15. Write for delivered prices to

**JOHN DEVLIN HAY CO., Inc.**  
192 N. Clark St., Chicago, Ill.

## BACTERIA Multiply When Milk Is Warm

Tests show that milk kept for 12 hours at 50 degrees F. has a bacteria count of 18,000, as compared with a count of 55,300,000 when kept for 12 hours at 80 degrees F.

A low bacteria count means less loss from souring, higher quality and consequently higher price.

## Use Concrete Cooling Tanks

Your market requirements for quality can be met by the use of concrete for cooling tanks, stable floors and mangers. Concrete is sanitary, easy to clean and keep clean and requires no repairs.

"Concrete on the Dairy Farm" a 32-page booklet tells the whole story. Your copy is waiting.

## PORTLAND CEMENT ASSOCIATION

A national organization to improve and extend the uses of concrete

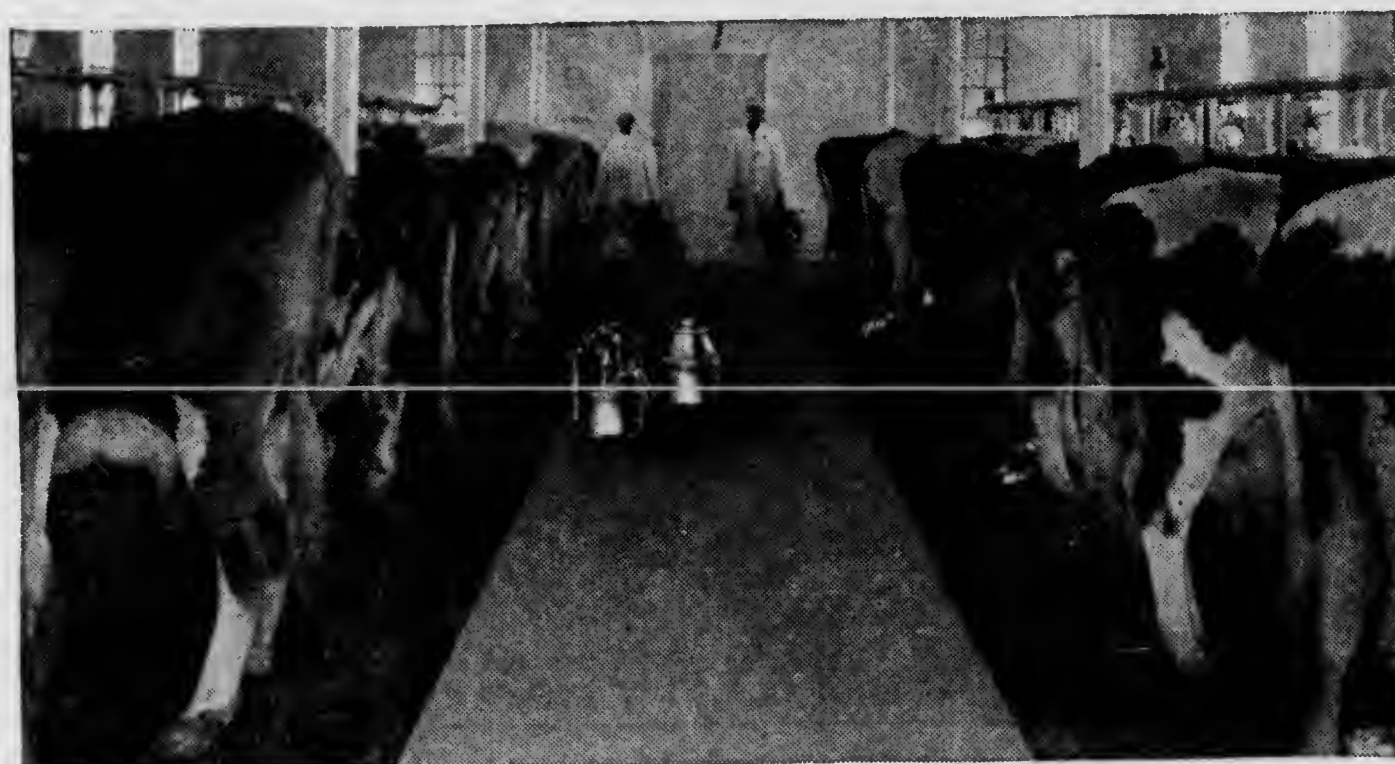
1315 Walnut St., Philadelphia  
Concrete for Permanence

## END SICKNESS THIS NEW WAY

No medicine, drugs or dieting. Just a light, small, comfortable, inexpensive Radio-Active Pad, worn on the back by day and over the stomach at night. Sold on free trial. You can be sure it is helping you before you buy it. Over 150,000 sold on this plan. Thousands have written us that it healed them of Neuritis, Rheumatism, High Blood Pressure, Constipation, Nervous Prostration, Heart, Lungs, Liver, Kidney, Bladder trouble, etc. No matter what you have tried; or what your trouble may be, try Deane's Radio-Active Solar Pad at our risk. Write today for FREE Trial offer and descriptive literature. Radium Appliance Co., 115 Bradbury Bldg., Los Angeles, Cal.



This is one of many noted herds milked with the De Laval Milker




Producing high quality, low bacteria count milk at the Green Hill Farm, Hyattsville, Md., with the aid of a De Laval Milker. This splendid farm is owned by Col. E. Francis Riggs.

## De Laval Milker Supplies Clean Milk to Noted Washington Dairy

THOMPSON'S Dairy is one of the leading dairies that supply Washington's fastidious trade with the high quality of milk which it demands. Cleanliness and quality must be considered above all else, and to supply this demand, Thompson's Dairy gets its very cleanest and most wholesome grades of milk from the Green Hill Farm, owned by Colonel E. Francis Riggs and located at Hyattsville, Md.

A De Laval Milker is used at this extremely sanitary and well-kept farm, and it has been very successful in producing the maximum flow of low bacteria count milk. In fact, the bacteria count shows an average well below the ten thousand standard for Certified Milk set by the Medical Board.

De Laval Milkers are producing cleaner milk on hundreds of modern farms. Write for full particulars or ask to have a De Laval representative call. No obligation.



**Thompson's Dairy**

1015 14th Street, N.W.  
WASHINGTON, D.C.

December 12, 1927.

The De Laval Separator Company,  
165 Broadway,  
New York City.

Gentlemen:

Our supply of Certified and Grade A Raw milk is produced on the Green Hill Farm at Hyattsville, Maryland.

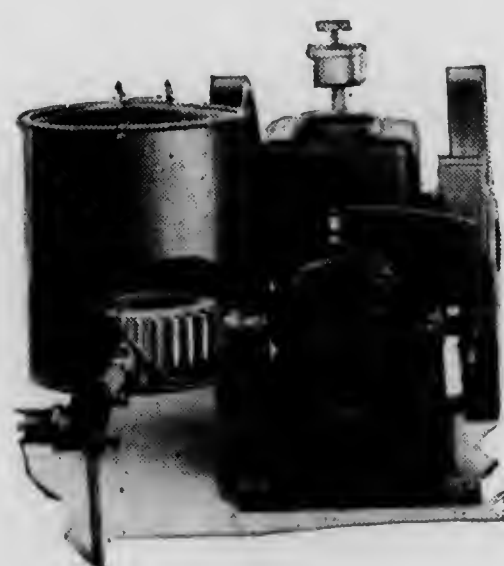
This dairy farm owned and operated by Colonel E. Francis Riggs is modern in every way. A healthy herd of Guernsey cattle is kept which insures milk of a high total solids content. In order to be assured of a high quality milk, bacteria tests are made daily. These tests show that the milk runs consistently low and well below the ten thousand standard set by the Medical Board. As a part of Green Hill Farm's dairy equipment is a De Laval milker.

Yours very truly,  
THOMPSON'S DAIRY

ALH By *A. H. Thompson*

**THE DE LAVAL SEPARATOR COMPANY**  
NEW YORK CHICAGO SAN FRANCISCO  
165 Broadway 600 Jackson Blvd. 61 Beale Street

### Alpha Engine Water Heater Provides Hot Water Economically for Washing De Laval Milker



The Alpha Exhaust Water Heater enables users of the De Laval Milker to have on hand a supply of hot water for cleaning the milker immediately after the milking operation has been concluded. In the production of low count milk it is necessary to have hot water on hand immediately after milking. With the Alpha Exhaust Water Heater this is easy, for the water is heated during the milking process, does not have to be carried far, the engine necessarily being close to where the milking is done, and there is no extra cost for fuel consumed in heating the water.

Everywhere used, the heater has been extremely successful in enabling the production of cleaner milk with greater ease. It is scientifically designed, causes absolutely no back pressure on the engine, and heats the water satisfactorily. This Exhaust Water Heater may be obtained from any regular De Laval Agent.

# Milk Producer

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

Volume IX

West Chester, Pa., and Philadelphia, Pa., August, 1928

No. 4

## The Aims and Methods of Collective Bargaining\*

H. D. ALLEBACH, President

Inter-State Milk Producers' Association, Inc., Philadelphia, Pa.

The problems confronting the early cooperative bargaining organizations have been varied and many. Ten years or more ago those interested in the movement had to convince not only the producers themselves as to the wisdom of the new policy but had to prove to the buyers of their products that their efforts were fair and within the confines of good marketing and sound business practices.

Marketing conditions are so varied in the different sections of the country that policies and plans, admirably adaptable in some sections may prove almost worthless in others. It is therefore quite necessary to know intimately your own conditions and plan to fit these needs. This, in itself, is often a difficult problem but is one which must be carefully worked out and solved.

The collective bargaining cooperative association was the type usually agreed upon during the revival of interest in cooperative marketing on the part of the farmers in the fluid milk areas during the war period. This was the easiest form of organization to set up rapidly. Soon it was apparent that it was not difficult to sell the idea to farmers, even those who had been perhaps somewhat disappointed by some poorly managed previous cooperative effort. A number of such organizations have since then been changed to pooling and processing organizations, to meet the change in market conditions in their respective territories. Others have remained as bargaining organizations to the present time, with such changes in policy and methods as would meet the needs of their markets.

Some organizations have shifted more or less back and forth as to their function and set-up. For instance, some of the producers in the Chicago district are now endeavoring to reestablish a bargaining organization after having gone through various experiences with different types of pooling, processing and handling types of organizations.

### Early Problems

In the Philadelphia Milk Shed, the territory in which I am particularly interested, our problems at the time of organization were not unlike those that have existed in many other territories. The cooperation on the part of the producers, themselves, was very weak and that with the buyers was practically nothing.

Our first problem, therefore, was to find a group of producers who could themselves realize the problems of a greater movement; who realized that the undertaking was not an individual one, but one that would be of benefit to the industry as a whole.

At that time we were confronted with irregular methods of buying, irregular methods of payments, unsatisfactory conditions of weighing or measuring, failure to pay on the part of some irregular buyers, and often irregular and

unfair practices on the part of the producers, themselves.

To iron out all these problems at one time was almost an impossible task. Our success has been due to a development of education, both on the part of the producer as well as on the part of the buyer.

Having laid down a sound business policy—one that is adapted to the needs of the territory, the next great problem was that of selling the idea to the pro-

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See this page for description of this chart

ducers themselves. This is an important part of the program as it must be fully realized that unless you have a strong and united backing on their part it will be next to impossible to exert any pronounced influence on the buyer.

Chart number one (on page six) shows our idea as to just what a cooperative bargaining organization will have to look like. All of the producers within the territory must be gathered together under a big umbrella, and no one should endeavor to pull it down. Each and every one must help to carry it and do his share to promote the welfare of the program, realizing that the organization is theirs, and not merely the officers. When this is accomplished we then have a strong organization. Show the buyer that you are interested in the production of your product at a

fold, and as a quotation made by Dr. Clyde L. King states, between producers, distributors and consumers, "the points in common are more important than the differences." With this chart I am trying to illustrate that in working out some of our problems, the three parties above referred to must be considered.

**Selling Your Service to the Producer**  
The cooperative bargaining organization must be well sold to its producer members. This may be accomplished in a variety of ways. In the early days personal contact with each producer is absolutely imperative. The producer must be made to realize that the organization is his organization; that it is operated in his interest. Personal and group contacts aid materially in bringing about this result. The producer must

Chart number three (shown on this page) exhibits how this work is done in our territory.

You will see at the top where a young man is checking on the testing of the members' milk at the dealers' plants; next you will see him checking on the weights of the milk. This, we believe, is a very important service. In the center you will see a postal card which is sent to every member, showing what we found his test to be. This service keeps him very close to the organization and makes him a better member than almost anything else we could do.

The fourth illustration on this chart will explain to you the system we are

(Continued on page 6)



## Morrisons Cove Farmers' Reunion Hold 28th Annual Gathering

For a period of many years the farmers in the Morrisons Cove Community, located in one of the best dairying sections in central Pennsylvania, partly in Bedford and in Blair counties, have held yearly gatherings of its farm folk.

These picnics usually of two days duration, have been largely attended and serve to bring closer together the farm people of that district.

This year's picnic was held at Lopus's Grove, near Henrietta, Pa., on July 25th and 26th and was attended by approximately 2500 persons.

The first days session included sports for the children, also singing by members of the Boys and Girls Bible School of the combined Henrietta churches. Musical programs were presented on the first day by the Morrisons Cove Vocational School Band while on the second day the Salemville Band furnished the music.

The first days program also included an address by C. I. Cohee, Quality Control Department of the Philadelphia Inter-State Dairy Council. The subject of his address was "The Three Legged Stool of Good Dairying," in which he said that Good Dairying could be divided into three major factors—Good Production, Good Quality and Good Marketing. "These factors," he said "comprise a safe and sound program for every dairyman to follow." "Profits depend largely on the volume of production. That means the productive rate of each cow. In other words a herd of 10,000 pound producers would, if properly cared for be profitable, while a herd of 1000 pound producers would not. The volume of the business you do is an important factor.

"Hauling 20 quarts of milk from a single cow to a receiving station 10 miles away would not be considered a good business proposition. It does not represent volume.

"Quality of product is another big factor in successful dairying. The public demands good, clean, safe milk, of high quality. Unless your milk is of good quality it can not be profitably marketed. This is true, not only of milk but of every farm product.

"Know your Market, is the third important factor in good dairying. If you do not have a strong marketing organization the problem will be a difficult one. A strong marketing association knows marketing conditions, knows the needs of the market, the amount of milk required to supply that market and from the knowledge of these facts knows how to guide the factors governing that market.

"Profitable production depends upon the kind of cows that you have, cows that will produce a satisfactory volume of milk and such cows properly cared for, producing quality milk, spell success for your dairy."

H. G. Niesley, Extension Department, Pennsylvania State College made an address on "The Farmers Position." "The world does not owe the farmer a living individually, but collectively as an industry, it does. It is up to the individual farmer to make his business profitable. Price fixing is not the answer. Quantity determines the price. High prices invite production while declining prices reduce production. Supply and Demand govern prices and demand is governed by the ability of the consumer to buy.

"What is a fair price for farm pro-

ducts?" All you can get, consistent with supply and demand.

Now good prices prevail for good products. Premium prices are paid for some grades of milk and other farm products. The public is being educated in the use of quality products—and will pay for it.

"To be successful a good farmer will diversify his product, both as to specialties and stable crops. Marketing is the big factor of success. This has many features—such as the preparation and collection of the product. Storing in times of surplus—grading and standardizing—and proper methods of distribution.

"Standards of living are advancing not only on the part of the consumer, but on the part of the farmer himself. Improvement means having the things that we want—better schools, better churches, better living conditions and better highways.

"To be successful therefore the farmer should produce quality products, the kind the people want when they want it and for which they are willing to pay good market prices.

At the evening program several Dairy Council plays were presented by students of the local schools, while as a closing feature the Philadelphia Inter-State Dairy Council showed several Educational motion pictures.

### Second Days' Session

The second days program included addresses by I. H. Benner, President of the Farmers' Reunion; J. E. Brumbaugh, Postmaster, Altoona, Pa.; Rev. Jacob Snyder, Compensation Referee, Harrisburg, Pa.; Hon. J. Banks Kurtz, congressman, Bedford-Blair District, and Jerre R. Wike, Roaring Springs, Pa. Brief addresses were also made by Iola Paul and R. E. Walters.

Officers of the Reunion Association are—I. H. Benner, President, C. I. Hoover, Treasurer and J. C. Kensinger, Secretary.

### More Farmers Participate in Cooperative Enterprises

A larger number of farmers than ever before are participating in cooperative marketing and purchasing, according to a recent survey of the Department of the National Agriculture. Some of the farmers are participating as members of particular associations, some as shareholders, some because of being under contract to market cooperatively, and some as shippers, consignors or patrons, using the facilities furnished by the various cooperative enterprises.

Including duplications because of farmers belonging to two, three, four or five associations, the estimated membership is 3,000,000, divided among the more important of the commodity groups as follows: Grain marketing associations, 900,000 participants; associations marketing dairy products, 600,000; associations marketing livestock, 450,000; associations marketing fruits and vegetables, 215,000; cotton marketing associations, 140,000.

Approximately 70 per cent of the total membership is in the 12 North Central States, compared with 53 per cent in 1925, and 55 per cent in 1915. Less than 12 per cent of the membership is now in the Southern States, compared with 30 per cent in 1925, and 16 per cent in 1915. The Pacific Coast States are of about the same relative importance, in regard to membership, as in 1925.

## Five County Alfalfa Campaign in Full Swing On Eastern Shore

The merger vogue has invaded the ranks of Maryland's Extension Service. Five agricultural agents of the Northern Peninsular Group in conference at Denton recently pledged their mutual support and co-operation in the launching of a Five County Alfalfa campaign, calculated to add five thousand new acres of alfalfa to the acreage in this crop already existing in Kent, Queen Anne's, Caroline, Talbot and Dorchester Counties, says E. I. Oswald, of the State Extension Service, in discussing the Denton meeting.

"The men in the Northern Peninsular counties have struck at the very keynote of dairy prosperity in this campaign. Figures secured by the dairy organizations delivering milk from this area to Philadelphia show conclusively that milk production per cow is approximately three thousand pounds annually. This is too low for profitable dairying, and the main cause is lack of feed. Alfalfa hay, containing as it does, only eleven per cent protein. If this campaign brings about its proposed alfalfa increase, an acre of alfalfa on the Eastern Shore will maintain about six dairy animals while the same acre under the present alfalfa shortage is expected to maintain nearly eleven. Every industry directly or indirectly connected with farmer prosperity will be vitally interested in the success of this undertaking."

U. S. Department Co-operating

The Five County Campaign has already secured the support and sanction of the United States Department of Agriculture. H. W. Hochbaum, Agriculturist of the Eastern States, with headquarters at Washington, D. C., has interested him self to the extent of providing Maryland forces with a carefully worked out plan of procedure which has proved effective in a similar enterprise in the Middle West. Intensive publicity specified by the Hochbaum plan, is already arranged for. Arrangements will soon be complete for keeping all farmers of the section in thorough touch with progress of events through local papers and other agencies. One of the leading newspapers of the Eastern Shore is now planning a special edition in the interest of alfalfa production for a future issue.

### Local Co-operation Expected

Present campaign plans include the support of Chambers of Commerce, lime companies, operating in the territory involved, seed companies, banks and other interested enterprises. Surveys of the alfalfa acreage already in existence will probably be run with the aid of the schools and county Farm Bureaus. Every available facility in the five counties will be secured and placed behind the campaign.

### Approved Seed To Be Used

Of first importance will be the use of approved seed. Plans are already afoot for bringing in one carload of alfalfa seed fully approved by the Department of Agriculture. Local dealers will be invited to co-operate in this seed importation.

### Three Counties To Conduct Soil Tests

Caroline, Talbot and Dorchester Counties will shortly engage in extensive testing of soil for the determination of lime requirements. Queen Anne's and Kent Counties carried on exhaustive tests two years ago in which more than eighty thousand acres of land were tested. It is worthy of note that only four

per cent of this enormous acreage showed lime enough at that time for profitable alfalfa production. It is prophesied that alfalfa plans in the three new counties testing soil will open extensive fields of operations for lime companies distributing their products this summer and fall. Two years ago, according to advice from the Extension Service in Queen Anne's County, farmers purchased two thousand tons of lime immediately following the completion of the soil tests. Facilities are already arranged for the testing of soil by the agricultural Agents at Denton, Easton and Cambridge. Testing will also be continued at Chestertown and Centerville.

### Vital Results Possible

Far reaching results will be forthcoming from the Five County Campaign, if present plans work out to the satisfaction of those in charge. While the primary motive behind the drive is the increase in the per cow production of milk and the consequent increase in revenue, other items nearly as important can be easily foreseen. Among these is the inevitable land improvement which must come from increasing legume acreage. Another quite important factor will be savings resulting from replacing expensive dairy feeds with home grown high protein hay. It is said that protein secured from alfalfa is the cheapest protein known to dairymen. Increased dairying efficiency may thus be expected. Many results attractive to dairymen should prove quite as attractive to those interests of the five counties dependent directly upon farmer prosperity for support. It is probable that no enterprise could be engaged in that would have more attractive returns for the entire section, or more universal support and approval from all local interests.

The sponsors of the campaign are the Agricultural Agents of the five counties mentioned: Horace B. Derrick, of Kent County; Ernest W. Grubb, of Queen Anne's; Thos. D. Holder, of Caroline; R. S. Brown, of Talbot and W. R. McKnight, of Dorchester. These five agents are operating under the auspices of the Maryland Extension Service and the United States Department of Agriculture in their regular offices at the County Seat in each of the five counties. Mutual cohesion will be obtained from frequent meetings alternating between counties. Rivalry is the keynote of the campaign. The fight is on in the five counties.

Higher Standards for Seed Potatoes

As the result of a recent conference called by the State Bureau of Markets the standards for Pennsylvania certified seed potatoes have been amended to become effective September 18, 1928.

The amount of common scab allowed has been reduced from five to three per cent, by weight, of moderate infection, wireworm injury from ten to five per cent of moderate injury, rots and freezing injury from two to one per cent, and the total tolerance has been designated as not more than six per cent where previously it was indefinite provided a stated maximum percentage relative to certain defects was not exceeded.

These amended regulations should result in an even higher quality of certified seed potatoes than has been produced in the past, marketing officials assert.

# World's Dairy Congress

## REVIEW OF THE GENERAL PROGRAM

By ROBERT W. BALDERSTON

The World's Dairy Congress which opened its sessions on the 26th of June, in London, England, was an event of unprecedented importance in the annals of the dairy industry.

The Congress was one of a series held under the auspices of the International Dairy Federation, a body which has its headquarters in Brussels, Belgium. Seven such meetings have been held previously, the largest and most important being undoubtedly that which was organized by the United States in 1923. This year's Congress is the first to be held in Great Britain.

The Congress provided opportunities for showing what is really meant by the dairy industry. The complexity of the business of providing the dwellers in towns and cities with a daily supply of milk is often only faintly appreciated. Those who participated in the Congress were able to gain new insight into the stages through which milk passes on its way from the producer to the consumer and the care and attention bestowed on the treatments it undergoes in the interests of public health. Only with such knowledge is it possible to appreciate properly the cost of milk handling on the up-to-date lines which is now in operation.

At the same time, no industry, however up-to-date will be bold enough to say that it has achieved the last word in development. It is recognized by those engaged in the milk industry, that there are numerous problems confronting them day by day which hinder further development and which need mutual discussion before satisfactory solutions can be expected. One of the main objects of the Congress was to secure the assembly of dairying experts from all parts of the world in order that these problems

(a) A number of sessions devoted to the reading of papers and subsequent discussions by leading authorities dealing with a large number of problems of practical importance to all branches of the dairy industry.

These sessions were held at the Central Hall, Westminster, London, on the 27th, 28th, and 29th of June.



DAIRY BARN OF KING GEORGE V, IN ENGLAND

(b) A series of scientific conferences by technical experts, held at the University of Reading.

(c) Conducted tours to dairy establishments, milk producing farms, educational institutions, etc., planned so as to afford a fair and critical insight into all phases of the milk industry in that country.

The National Farmers' Union gave the scheme its active support, and the British Dairy Farmers' Association, to whom the initiation of the movement was due, spared no effort to help it to a successful issue.

"Many people are still under the impression that the farm is an unclean place in which milk is produced under objectionable conditions," said Lord Desborough, President of the Congress, in the course of a broadcast talk on the milk industry in England in relation to the World's Dairy Congress. "These people do not appreciate that the constant efforts of farmers over many years, assisted by the research work of national institutions, has resulted in a rapid and extraordinary improvement of the conditions under which milk was produced."

"The World's Dairy Congress was", he said, "another evidence of the whole-hearted desire of the milk industry in all its branches to leave no stone unturned in its efforts to provide the people with a pure and nutritious supply of whole milk and with the very highest standard of home-manufactured dairy product."

"The Congress", he added, "has a vital and important message to every person. It is a message which has as its crux an open invitation to all people to increase their consumption of milk and milk products. We have today a milk supply which can be recommended with confidence as clean, wholesome and nutritious. We have definite scientific

evidence of the extreme advantage to be gained from increased consumption of milk. The Congress will not have fulfilled all that it set out to do unless it succeeds in permanently impressing on the people of this country, (England) the fact that an increased consumption of milk is a sure road to national health, and one of the best safeguards against the inroads of disease.

"Milk is an ideal food", concluded

Reed, the new chief of the U. S. Bureau of Dairying, L. W. Morley, Secretary of the American Jersey Cattle Club, Samuel Green of the California Dairy Council, were also present at the World's Dairy Congress. Mr. Robert W. Balderston, represented the Philadelphia Inter-State Dairy Council.

The formal program included many subjects of general or special interest. Much interest was shown in the paper presented by Dr. Clyde L. King (printed in the July issue of the Milk Producers' Review.) Delegates from many countries stated to Dr. King, afterward that the subject of a sound relationship between producer, distributor and consumer with proper regard to the best interests of each, was one of paramount importance in their respective countries.

The paper by Dr. E. V. McCollum was one of several on the importance of milk in a well-balanced diet.

A number of experts spoke on the subject of milk and nutrition.

Professor H. R. Kenwood of England states:—

"In Great Britain alone less milk per head of population was consumed than in most other civilized countries. By securing for every child needing it, a small supply of fresh milk daily a very rich reward was to be gained. Surely it should be one of the main aims of all Local and Health Authorities to teach the public how best to feed themselves and their children at the lowest possible cost.

Dealing with measures to make milk supplies safe, the speaker said that the recognition of the value of pasteurization (previous heating) of milk to the public and trade was growing and was already widespread. The practical tests applied so extensively in this and other



VIEW IN THE LLANCOLLEN DAIRYING SECTION IN WALES, ENGLAND

countries had always proved the wisdom of previously heating cows' milk.

Much of the program of the section of the Congress devoted to milk distribution was concerned with topics related to standards of cleanliness and the efficiency of modern equipment. England is much interested in such matters at the present time and all sessions were very well attended. At the meetings of the sections of production were discussed all such matters as cow testing work, balance feeding and breed improvement.

The sections devoted to bacteriology and other technical questions, discussed papers prepared by experts from all important dairy countries. At the gen-

(Continued on page 7)



## INTER-STATE MILK PRODUCERS' REVIEW

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Officers of the Inter-State Milk Producers' Association have been playing important parts in national and international dairy meetings during the past summer. H. D. Allebach, president of the association was an attendant and made an important address at the American Institute of Cooperation which has been holding its summer session in Berkeley, California, and from which he has just returned. Dr. Clyde L. King has been officially representing the association at the World's Dairy Congress, held recently in London, England, while Robert W. Balderston, secretary of Philadelphia Inter-State Dairy Council, has also been representing the Council at the World's Dairy Congress.

In another column, in this issue of the Review, we are printing an article on the World's Dairy Congress, sent us by Mr. Balderston, which outlines the purpose and scope of this meeting.

These two important meetings have had much to do in promoting economic production and marketing of milk and they bring together the latest thought in the every day problems in the industry.

Several interesting letters have reached us from H. D. Allebach, president of the Inter-State Milk Producers' Association, who, at the request of the American Institute of Cooperation, is taking the message of your organization and its development to those who are attending its sessions at Berkeley, California.

Mr. Allebach writes that he has had an interesting trip to the Pacific Coast. Wheat field after wheat field were noted in Missouri and Kansas. Corn field after corn field and oat field after oat field in Ohio and Indiana, but New Mexico and Arizona did not appear so prominent agriculturally.

A brief stop was made at the Grand Canyon in Colorado, where he essayed his ability as a Bronco Buster—or probably one might call it a "Body Buster," and got through safely.

Visits were made to various California cooperatives, particularly those engaged in citrus fruit, grape, orange and walnut growing and marketing.

The meetings of the Institute of Cooperation, Mr. Allebach says, have been extremely interesting and educational. Many outstanding features of the cooperative movement were developed and discussed and it is believed that those attending the Institute have profited greatly by the many out-standing facts developed.

Editors Note:—Mr. Allebach expects,

at this writing, to be back at his desk, in the offices of the Inter-State Milk Producers' Association, on August 6th, 1928.

## Barn Ventilation and Lighting Service

Farmers located in the Philadelphia Milk Shed, who contemplate the installation of Ventilation or Lighting Systems in their barns, may, by communicating with the Inter-State Milk Producers' Association or the Philadelphia Inter-State Dairy Council, Flint Building, Philadelphia, Pa., obtain the cooperation of these departments in planning their work as well as that of the United States Department of Agriculture, Department of Roads and Drains, which is operating in cooperation on this class of work.

## Wages for Penna.

### Farm Labor Lower

Farm wages on July 1 were reported as the lowest in Pennsylvania of any of the states in the northeastern section of the country, according to the Federal State Crop Reporting Service.

It is also stated that wages paid for labor with board on July 1 were the lowest in the Commonwealth this year of any year since 1923.

Taking the United States as a whole, wages of all classes of farm labor are below wages a year ago.

The lower level of farm wages, says the United States Department of Agriculture, is likely due to the larger supply of farm labor available this year, the larger supply being probably caused by a much lower volume of industrial employment which has prevailed during the first six months of 1928, thus releasing more labor for the farms.

## New Inter-State Field Man

J. Thornton Plummer, Quilton, N. J., has been appointed as Field Man in the Field and Test Department of the Inter-State Milk Producers' Association. He will be stationed in the Wilmington, Delaware, territory.

Mr. Plummer is a farm raised boy, the son of Joseph H. Plummer, a member of the Inter-State Milk Producers' Association in southern New Jersey. He is a graduate of the Salem, N. J., High School and of Rutgers University. He has had practical as well as theoretical training in dairying. Since his graduation from the Rutgers University in 1926, he has been employed in the butter department of Swift & Co.

## One Cow vs. One Dozen

Analysis of more than 100,000 yearly individual records from cows on test in dairy herd improvement associations indicates that, on the average, cows that produced 100 pounds of butterfat a year returned \$14 each over cost of feed; those that produced 200 pounds, \$54 over cost of feed; 300 pounds, \$96; 400 pounds, \$138; and 500-pound cows returned \$178 over cost of feed. Thus the man milking a 500-pound producer would have more return than if he milked a dozen 100-pound cows, and this would take no account of the added labor of milking and caring for the larger herd or of the much greater expense of providing stable room for a herd instead of a single animal. The figures from returns are based on farm prices from all parts of the country, including whole-milk districts.

## MARKET CONDITIONS

FREDERICK SHANGLE

Continuous hot weather, during a large portion of July has resulted in a sharp decrease in production. While earlier conditions indicated an excessive productive rate, with possibilities of the market being flooded, weather conditions have sharply retarded production to such an extent that the market is now on a very satisfactory basis. While this decrease was sharp it now appears to have reached a more stable productive rate.

Continuous rains have, in most sections, resulted in good pasture conditions although the prevalence of flies have on the other hand resulted in decreased production.

The usual vacation season has influenced fluid milk consumption to some extent but owing to the warmer weather the consumption of ice cream has increased to a marked degree.

The labor situation in most large industrial areas has not shown any marked change. There is still considerable unemployment and the recovery seems to be very spotty.

Economic production is a strong factor in dairying and we would emphasize the necessity of removing the "boarder cow" from the herd. If she is an unprofitable producer she will not pay for her own maintenance and very often reduce the profit making ability of your other cows.

We would advise that you test out the butterfat productive ability of your herd. Our Testing Department makes, with your assistance, such investigation. Many farmers have tested their cows by this method. You can do it. Send for particulars, referring to our weekly butterfat testing method, which is free to our members.

The ready mixed feed situation is somewhat easier. Indications point to lower prices in the near future.

Our statistical records show that during the month of June, the Inter-State Milk Producers' Association handled 53,648,496 pounds of milk. This shows an increase of 1,096,949 pounds as compared to May, 1928.

### July Milk Prices

Grade B market milk, three per cent butter fat content (basic quantity average), delivered f. o. b. Philadelphia, during July is quoted at \$3.29 per hundred pounds.

The price of basic milk (basic quantity average) three per cent butterfat con-

tent, delivered at Receiving Stations in the 51-60 mile zone, during July, is quoted at \$2.71 per hundred pounds. The usual butterfat differentials and freight rate variations applying at other mileage points in the territory, are shown by quotations on page 5, of this issue of the Milk Producers' Review.

The price of Class I surplus milk, for July, three per cent butter fat content, at all Receiving Stations, is \$1.72 per hundred pounds. For f. o. b. Philadelphia delivery the price for Class I surplus milk is quoted at \$2.30 per hundred pounds or 4.95 cents per quart.

Under the Philadelphia Selling Plan, Class II milk is eliminated during the last half of the year. All milk will, until further notice, be sold under the classifications of basic and Class I surplus.

### July Butter Market

The market has ranged from irregular to firm during the month. There have been no sharp fluctuations in prices, but buyers have exhibited some nervousness as to the future. As the month advanced confidence improved somewhat and it is now believed that the present price level has been pretty well set for the balance of the flush producing period, barring any unusual or unexpected changes in the current production or demand situation.

For some weeks there has been a relative scarcity of the medium and lower grades. The 88 score, New York City, showed an advance of 51-2 cents over prices of one year ago while 92 score, in the same market was quoted 31-2 cents above that of a year ago.

Total stocks of butter in cold storage warehouse, reported by the United States government on July 21st, were estimated at 102,950,000 pounds, as compared to 129,250,000 a year ago.

Prices of 92 score, solid packed butter, New York City, opened the month at 44 cents, by mid month the price ranged around 45 cents. A fractional advance followed to 45 1-2, followed by a decline of 1-2 cent and a gradual resumption to 45 1-2 cents, at which price the market closed.

The average price of 92 score butter solid packed, New York City, on which the July surplus price was computed was .4481 cents a pound, as compared to .4409 in June and .4188 cents a pound one year ago.

## Report of the Field and Test Department Inter-State Milk Producers' Association.

The following statistics show the aggregate operations of all the Inter-State Milk Producers' Association field men in connection with testing, weighing and general membership work, for the month of June, 1928.

No. Tests Made ..... 7817  
No. Plants Investigated... 50  
No. Membership Calls... 205  
No. New Members  
Signed ..... 93  
No. Cows Signed ..... 605  
No. Transfers Made .... 19  
No. Meetings Attended... 11  
No. Attending Meetings... 1017

## Report of the Quality Control Department Philadelphia Inter-State Dairy Council.

The following is a report of the work done by the Quality Control Department of the Dairy Council, for the month of June, 1928.

No. Inspections Made... 2490  
Sediments Tests ..... 1055  
Bacteria Tests ..... 352  
No. Meetings Held .... 1  
Attendance ..... 125  
No. Miles Traveled ... 26,096  
During the month 20 dairies were discontinued from selling for failure to comply with the regulations—5 dairies were reinstated before the month was up.  
To date 106,860 farm inspections have been made.

## LATEST MARKET PRICES

### PHILADELPHIA SELLING PLAN

The basic price, quoted below for July, 1928, is to be paid by cooperating dealers on the average basic quantity established by each producer. For all milk bought in excess of the basic amount, the surplus prices, quoted below for the month of July are to be paid. Under the Philadelphia Selling Plan, all milk in excess of the established basic quantity, will, until further advised, be paid for by cooperating dealers at the Class I Surplus Price, that is on the basis of the average price of 92 score solid packed butter, New York City, plus 20 per cent.

The following quotations are based on 3 per cent butterfat content milk and a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down, and are for all railroad points. (Inland stations carry differentials subject to local arrangements).

### INTER-STATE MILK PRODUCERS' ASSOCIATION PRICES

This price list is issued with the understanding that it is net to the producers and that all buyers using it as a basis of payment to producers, shall in addition thereto make the following contributions and payments:

(1) To the Philadelphia Inter-State Dairy Council 2c per 100 pounds (40 1/2 quarts) of all milk purchased from any producer at prices listed hereon.

(2) To the Inter-State Milk Producers' Association 2c per 100 pounds (40 1/2 quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2c per 100 pounds (40 1/2 quarts) of all milk bought from other producers at prices listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed, for improvements and stabilization of markets and for an educational campaign advertising the food value of dairy products.

BASIC PRICE		BASIC PRICE	
F. O. B. Philadelphia		Grade B Market Milk	
Per 100 lbs.	Per qt.	Per 100 lbs.	Per qt.
3.29	7.1	2.71	6.1
3.25	6.9	2.67	5.9
3.21	6.7	2.63	5.7
3.17	6.5	2.59	5.5
3.13	6.3	2.55	5.3
3.09	6.1	2.51	5.1
3.05	5.9	2.47	4.9
3.01	5.7	2.43	4.7
2.97	5.5	2.39	4.5
2.93	5.3	2.35	4.3
2.89	5.1	2.31	4.1
2.85	4.9	2.27	3.9
2.81	4.7	2.23	3.7
2.77	4.5	2.19	3.5
2.73	4.3	2.15	3.3
2.69	4.1	2.11	3.1
2.65	3.9	2.07	2.9
2.61	3.7	2.03	2.7
2.57	3.5	1.99	2.5
2.53	3.3	1.95	2.3
2.49	3.1	1.91	2.1
2.45	2.9	1.87	1.9
2.41	2.7	1.83	1.7
2.37	2.5	1.79	1.5
2.33	2.3	1.75	1.3
2.29	2.1	1.71	1.1
2.25	1.9	1.67	0.9
2.21	1.7	1.63	0.7
2.17	1.5	1.59	0.5
2.13	1.3	1.55	0.3
2.09	1.1	1.51	0.1
2.05	0.9	1.47	
2.01	0.7	1.43	
1.97	0.5	1.39	
1.93	0.3	1.35	
1.89	0.1	1.31	
1.85		1.27	
1.81		1.23	
1.77		1.19	
1.73		1.15	
1.69		1.11	
1.65		1.07	
1.61		1.03	
1.57		0.99	
1.53		0.95	
1.49		0.91	
1.45		0.87	
1.41		0.83	
1.37		0.79	
1.33		0.75	
1.29		0.71	
1.25		0.67	
1.21		0.63	
1.17		0.59	
1.13		0.55	
1.09		0.51	
1.05		0.47	
1.01		0.43	
0.97		0.39	
0.93		0.35	
0.89		0.31	
0.85		0.27	
0.81		0.23	
0.77		0.19	
0.73		0.15	
0.69		0.11	
0.65		0.07	
0.61		0.03	
0.57			
0.53			
0.49			
0.45			
0.41			
0.37			
0.33			
0.29			
0.25			
0.21			
0.17			
0.13			
0.09			
0.05			
0.01			

JULY SURPLUS PRICES	
At All Receiving Stations	
Test	Per 100 Lbs.
3.05	\$1.72
3.01	1.74
2.97	1.76
2.93	1.78
2.89	1.80
2.85	1.82
2.81	1.84
2.77	1.86
2.73	1.88
2.69	1.90
2.65	1.92
2.61	1.94
2.57	1.96
2.53	1.98
2.49	2.00
2.45	2.02
2.41	2.04
2.37	2.06
2.33	2.08
2.29	2.10
2.25	2.12
2.21	2.14
2.17	2.16
2.13	2.18
2.09	2.20
2.05	2.22
2.01	2.24
1.97	2.26
1.93	2.28
1.89	2.30
1.85	2.32
1.81	2.34
1.77	2.36
1.73	2.38
1.69	2.40
1.65	2.42
1.61	2.44
1.57	2.46
1.53	2.48
1.49	2.50
1.45	2.52

JULY BUTTER PRICES	
92 Score Solid Packed	
Philadelphia	New York
45	44
44	43
43	42
42	41
41	40
40	39
39	38
38	37
37	36
36	35
35	34
34	33
33	32
32	31
31	30
30	29
29	28
28	27
27	26
26	25
25	24
24	23
23	22
22	21
21	20
20	19
19	18
18	17
17	16
16	15
15	14
14	13
13	12
12	11
11	10
10	9
9	8
8	7
7	6
6	5
5	4
4	3
3	2
2	1
1	0

MONTHLY SURPLUS PRICES	
4 1/2% at all Receiving Stations	
1927	1928
May	2.07
June	2.01
July	1.72
August	1.67
September	1.64
October	1.61
November	1.58
December	1.55
1928	1.52
January	1.49
February	1.46
March	1.43
April	1.40
May	1.37
June	1.34
July	1.31

## August Prices Inter-State Milk Producers' Association, Inc.

The price paid for basic milk during August, 1928, will, subject to market conditions, be the same price as quoted for July, 1928. Milk sold to cooperating dealers will be paid for on the basic and surplus plan. The established basic quantity will be paid for at basic prices. Surplus will be paid for by cooperating dealers on the average price of 92 score butter, solid pack, New York City, plus 20 per cent for the month.

The second surplus grade has been eliminated until further advised.

## MONTHLY BASIC PRICES OF GRADE B OR MARKET MILK

3 per cent butter fat content

1927	F.O.B. quart Phila.	Receiving station 50 mile zone per cwt.
April	7.1	2.71
May	7.1	2.71
June	7.1	2.71
July	7.1	2.71
August	7.1	2.71
September	7.1	2.71
October	7.1	2.71
November	7.1	2.71
December	7.1	2.71
1928	7.1	2.71
January	7.1	2.71
February	7.1	2.71
March	7.1	2.71
April	7.1	2.71
May	7.1	2.71
June	7.1	2.71
July	7.1	2.71

## Inter-State Milk Producers' Association Incorporated Flint



# The Aims and Methods of Collective Bargaining\*

By H. D. ALLEBACH

(Continued from page 1)

using in checking on the weighing of milk when a member becomes dissatisfied.

By doing this we can also check as to the condition of the milk when leaving the farm. By getting this information the fieldman is in a position to advise the producer how to better take care of this milk, so that it will carry to its destination in better condition and also gives him a better idea as to the real weight of his milk.

## Keeping the Producer Informed

One important factor in the operation of the collective bargaining organization is that of keeping the members informed. Early in our existence we adopted a plan of sending to all of our members a brief monthly report of marketing conditions. This, after a short period was followed by the publication of the "Inter-State Milk Producers' Review," a monthly publication in which we not only quote at length the current prices paid for milk in the Inter-State Milk Producers' Association territory, but emphasize any pertinent facts relative to market conditions, the trend of the market, and policies of the organization as may develop from time to time. The publication of this paper, we believe, has done much toward selling the Association and keeping it sold on its value as a cooperative bargaining association.

## Selling Plan

An important factor in the marketing of fluid milk is that of supply. In the ordinary course of production, wide variances developed. In the summer season there was plenty of milk, and the over-supply frequently broke the price. On the other hand the seasonable swing in production resulted in a shortage in the winter, with a consequent upward trend in prices, but more likely, an undesirable extension of territory. From an economic standpoint an even distribution of milk, the year round, was not only desirable, but was of particular value as a price stabilizer. Under the old method the supply frequently reached as high as 35% greater than the demand. To adjust this condition the Philadelphia Selling Plan was adopted. Under this plan milk sold as basic and surplus milk.

## PHILADELPHIA SELLING PLAN

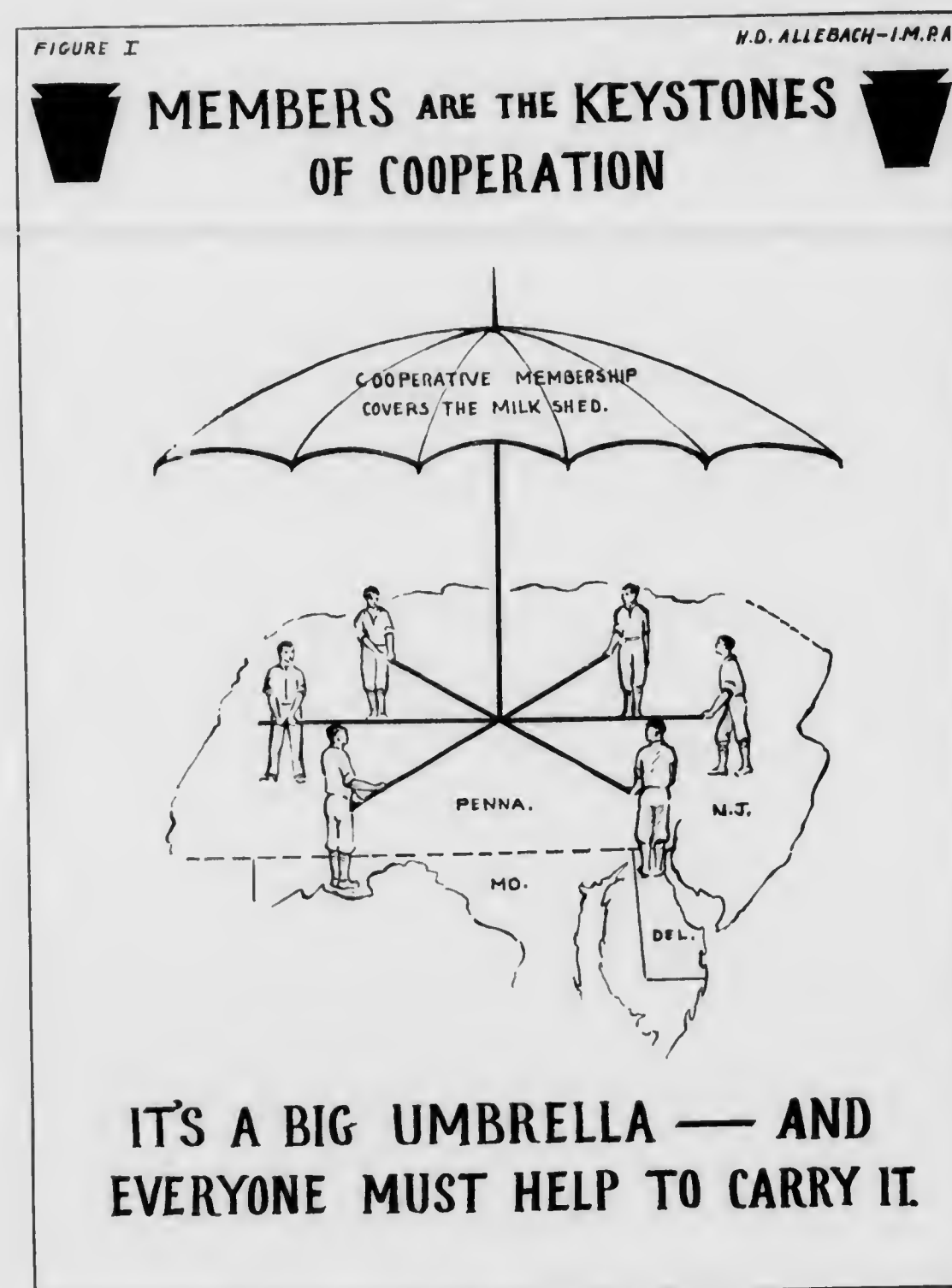
Inter-State Milk Producers' Association  
Effective Oct. 1, 1928

Memorandum of Conference held June 5, 1928, revising memoranda of previous conferences held October 3, 1921, September 8, 1926 and June 22, 1927.

Note—This plan having been printed in full in the July issue of the Milk Producers' Review has been omitted in the printing of this article.

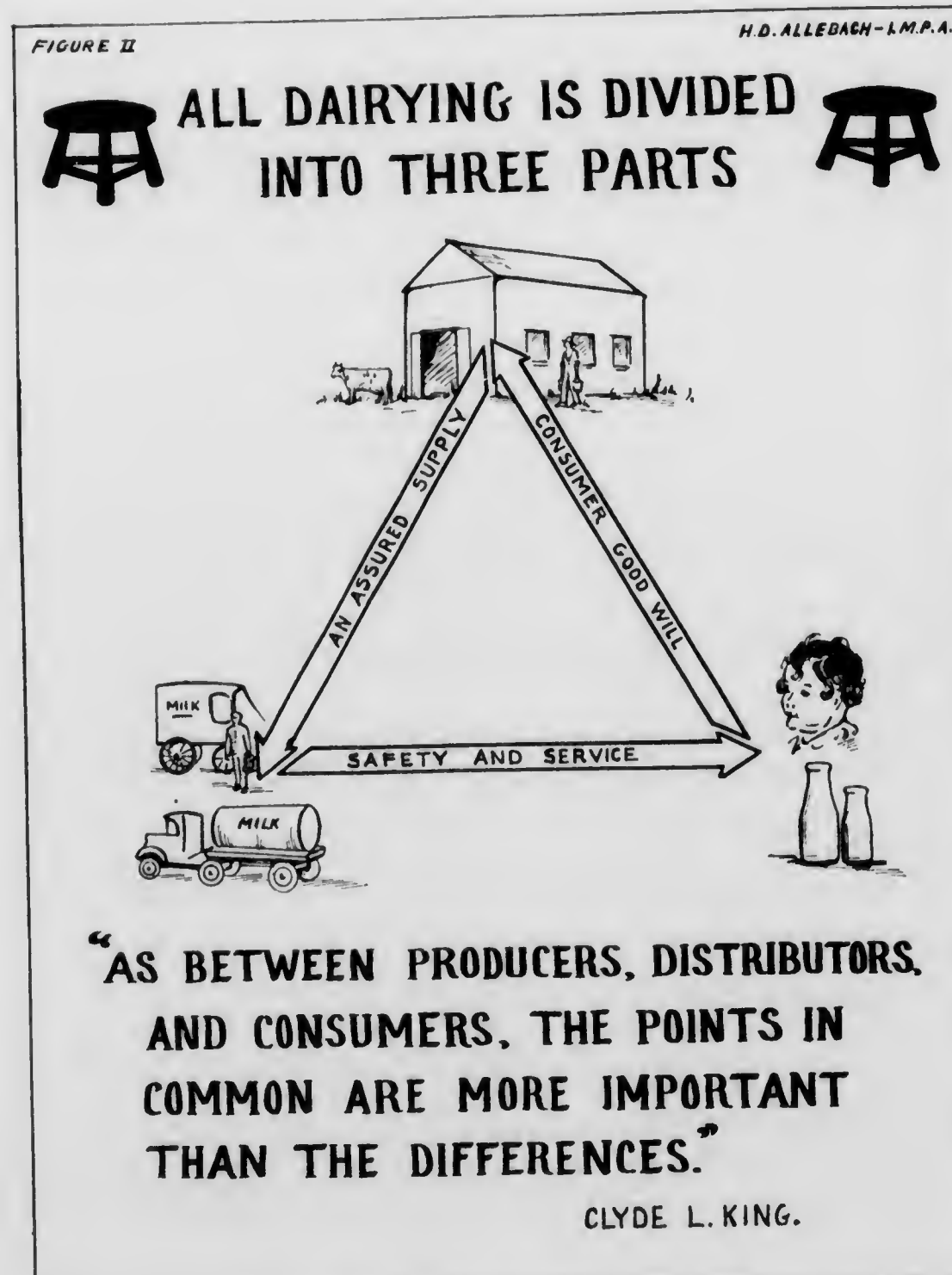
This plan is a modification of the plan we started with in 1919 and is along the same lines. In the beginning we used the fall production of one year to determine our basic amounts. In 1928 we used the average production of two years—1926-1927. In 1929 we will use the average production of three years, 1926-1927-1928, which is shown in this selling plan.

Figure No. 4 (see page eight). This chart illustrates the effect that the basic and surplus plan has had upon the seasonal variation in production. For the years prior to the beginning of the basic and surplus plan, production varied very sharply between the winter and summer seasons. This variation was as much as 72% of the monthly average production for the year 1913. Begin-



IT'S A BIG UMBRELLA — AND  
EVERYONE MUST HELP TO CARRY IT

See page one for description of this chart



See page one for description of this chart

ning in 1921, which was the second year of the basic and surplus plan, and during which year a variation of 54% of the monthly average existed, this seasonal variation of production was reduced to 22% of the monthly average in 1924. This reduction is forcefully brought out in the second section of the chart. As a means of measuring this decrease in variation and as a check on the goal toward which the basic and surplus plan aims to reach. The seasonal variation in demand is illustrated in the third section of the chart. This is based on the fluid milk requirements of Philadelphia.

It was apparent between 1924 and 1925 that the decrease in seasonal variation had gone to as far as it was desirable to attain from the marketing standpoint. The basic and surplus plan was modified in three or four important respects at this time, the principle one of which made a two and three year basis the method of determining payments rather than a single year basis which immediately preceded the season during which it was used. The effect of these modifications is to be noted in the fourth section of the chart.

During the years 1925-26-27, seasonal variation increased, somewhat, although it was still held within satisfactory limits. In 1927, perhaps, this variation was larger than desirable but it was no doubt due in part to the disturbance caused in 1926 by the elimination of that year as a factor in determining the base for the following year. Indications are that the variation in 1928 will not be as marked as in 1927, and that the selling plan as modified for 1929 will tend again to stabilize the variations at or near the low points reached in 1924 and 1925.

## Dairy Council Organized

It has been long evident that if a steady and increasing consumptive program was to be insured, the product must be of a quality that the consumer likes. In 1919 the organization realized that in order to increase consumption of milk we had to advertise the product, and advertising it we had to insure good quality. To do this we organized what is known as the Philadelphia Inter-State Dairy Council. Its purpose, as stated above, was to increase the consumption of milk and improve its quality. We, as a bargaining organization, realized after the world war was over that we had more milk produced in this country than the consuming public would use unless something was done.

After an educational campaign through the public schools and women's clubs as to the real value of milk, we then realized that we had to improve the quality. We set a standard in reference to the production of milk, and after taking sediment tests of the milk for a year or more we realized that some permanent regulations would have to be agreed upon by the producers to make a permanent improvement of the product. The regulations were written by a committee and presented to delegates at the annual meeting and unanimously agreed to by the farmers themselves.

After agreeing upon this the question arose as to who should enforce these regulations. We decided to organize what is known as the Quality Control Department, which is a department of the Philadelphia Inter-State Dairy Council. It was the duty of this department

(Continued on page 8)

# World's Dairy Congress

By R. W. BALDERSTON

(Continued from page 3)

eral session at which milk utilization and sanitary control were under discussion, Dr. C. W. Larson read a paper prepared by M. D. Munn, President of the National Dairy Council, outlining the work done in the United States to increase milk consumption through educating the public as to the food value of dairy products. A large display room adjacent to the meeting rooms in Central Hall, had been filled with material of this character drawn from United States, England, Germany, Austria, Sweden, Hungary and other countries. This display material from the United States, which had been partially prepared by the Philadelphia Inter-State Dairy Council, was explained to the delegates by Messrs. Larson, Balderston and Green, and Miss Lockhart.

Several full day and afternoon trips were made to points of interest to dairymen. The arrangements for these had been carefully made so as to permit of the greatest variety of investigations to be made in the shortest possible time. The milk plants of the United Dairies, Express Dairies and other companies of London, and of dealers in Reading, Birmingham, Glasgow and Edinburgh, were visited.

Certified and Grade A farms, supplying these and other markets were also inspected. Pure-bred cattle of high quality were seen, representing British Friesian (Holstein-Friesian), Shorthorn, Jersey, Guernsey, Kerry and other prominent English breeds. Experiment stations were visited, which were demonstrating new methods of feeding dairy cattle and manufacturing dairy products. A particular feature of this experimental work, both in England and Scotland, was that of improved methods of fertilizing and handling pastures for the most economical and efficient production of summer milk.

Two days of the Congress were spent at the Royal Agricultural Show, held this year at Nottingham. The first day

of the show the two thousand animals were all judged in a large number of open-air judging rings—all in action at once.

American dairymen watched the judging with great interest, as showing the thought in England with regard to breed characteristics and standards.

Many fine animals of all the prominent breeds, well known in the United States were on exhibition, and also many not so common in America or hardly known at all, as for instance the Blue Albion, the Dexter and the Longhorn. The next day all prize winning cattle were paraded in front of the grandstand before the King and Queen of England, and about eighteen thousand other spectators. On this day the Congress delegates had an opportunity to see a very large exhibit of dairy machinery, much of it exhibited by American firms. This display was arranged by the Congress management for the particular attention of Congress delegates. There were also large exhibits of farm machinery, much of it new and novel to American eyes, also seeds and cattle feeds.

The classes for beef cattle, horses, sheep, hogs and chickens were well filled and competition was keen. England has much interest in all kinds of live stock farming as the climate and soil are both particularly conducive to growing grass for pasture and hay.

After the Congress was officially closed, the delegates scattered, some to inspect dairy practice in Ireland, Holland, Denmark, Germany or Switzerland, and others to return directly to their homes.

Perhaps the greatest advantage gained by the delegates was the opportunity for interchange of ideas. The men and women from thirty-seven different countries would talk over their common problems, compare methods, and profit by the exchange of ideas.

## Radio Farm Market News Now Blankets Country

One hundred and seven radio stations throughout the United States now are broadcasting the farm market reports issued by the Bureau of Agricultural Economics, United States Department of Agriculture. The market news programs of these stations range from reports on a few agricultural commodities at local markets to complete statements on prices, shipments, and trade conditions for all farm products in leading consuming centers.

The radio market news service was begun experimentally in 1921 when three radio stations cooperated in broadcasting the reports. A year later, sixty-five radio stations were flashing out the market messages, following which there was a rapid expansion of the service to its present nation-wide scope.

Arrangements have been made in each city where Government market news work is conducted for one or more stations to broadcast information supplied by the branch offices of the Bureau of Agricultural Economics. There are 38 of these field offices in 22 States, connected by a leased telegraph wire system of 7,800 miles for the rapid interchange of reports on market conditions.

"Increased power and improved broad-

casting, together with better receiving sets," says the bureau, "have done much to aid in establishing the permanency of the use of radio for the benefit of agriculture. One station alone in a period of six months' broadcasting of market and weather reports received more than 5,000 letters of commendation from farmers, country banks, livestock shippers, and small merchants in the towns in twelve agricultural States surrounding the station.

"Farmers have usually bought the best radio sets available. They have bought sets as a rule, more selective, more capable of getting distant stations than has been necessary in the cities to get the local broadcasting. In 1923 the average cost of radio sets on more than 1,000 farms widely scattered over the country was \$175. Today, better and more easily operated equipment can be bought for half this amount or less."

A list of stations which broadcast the Government crop and market news, giving the complete agricultural program in each case, has been prepared for free distribution. Copies may be obtained by addressing the Bureau of Agricultural Economics, United States Department of Agriculture, Washington, D. C.



# A NEW C.T.A. RECORD (in Pennsylvania)

MADE WITH

# AMCO

## 32% SUPPLEMENT DAIRY



Part of Mr. Snyder's record-breaking herd.

With your new crop grains, mix AMCO 32% SUPPLEMENT DAIRY—200 lbs. of grain to 100 lbs. of this Amco Supplement—for a 20 percent protein mixture. For a straight dairy feed, use AMCO 20% DAIRY or AMCO 18% DAIRY on pasture.

WITH good cows, good handling, and good feed, H. A. Snyder, of Loyalsville, Pa., has set a new high mark for Cow Testing Associations in his state. His herd of fourteen purebred and grade Holsteins

averaged 526.4 pounds of butter fat for the year just ended—the record production; and made an average of 14,283 pounds of milk.

As he had home-grown corn and oats, he mixed them as long as they lasted with AMCO 32% SUPPLEMENT DAIRY, making a grain ration of 18 to 20 percent protein. Thus, while utilizing fully the grain-growing capacity of his farm, he depended on this supplement to make his ration palatable and highly digestible; and to get the cream of the proteins and the three necessary minerals. When the corn

and oats were gone, he mixed AMCO 12% FITTING RATION with AMCO 32% SUPPLEMENT DAIRY. Grain was fed nearly every day of the year (including the pasture season) at the rate of 1 pound of grain to 3 1/2 pounds of milk.

The herd average is the more remarkable considering the fact that six of the fourteen were first-calf heifers. The high cow in the herd, a 5-year-old registered Holstein, made 17,677 pounds of milk, containing 729.3 pounds of butter fat. Eleven cows made more than 400 pounds of fat.

For every dollar Mr. Snyder charged to feed (grain, roughage, and silage), he got back \$2.57 for milk. His total feed cost per cow averaged \$172.86 for the year, and his return per cow was \$444.90, a net return over feed cost of \$272.04 per cow.

DIVISION OFFICE: MUNCY, PA.

# AMCO

## FEED MIXING SERVICE

AMERICAN MILLING COMPANY  
EXECUTIVE OFFICES: PEORIA, ILL.

Plants at: Peoria, Ill.; Omaha, Neb.; Owensboro, Ky.  
Alfalfa Plants at: Powell, Garland, and Worland, Wyo.



# The Aims and Methods of Collective Bargaining\*

By H. D. ALLEBACH

(Continued from page 6)

to enforce the regulations agreed upon between the buyers and sellers of milk in our milk shed. After having these regulations for four years we decided that on June 1, 1928, every producer shipping milk to our market would be discontinued unless he had met all the regulations. This program has improved the quality of milk in our territory, tremendously. Moreover, it is unique, for we know of no other marketing organization in the country where the farmer and dealer have together agreed on sanitary regulations.

These same regulations have met the approval of the State Boards of Health within our jurisdiction, Departments of Agriculture within our States and local Boards of Health.

We also realize that with this improvement in quality the Dairy Council, through its many educational activities has been able to increase materially the consumption of milk.

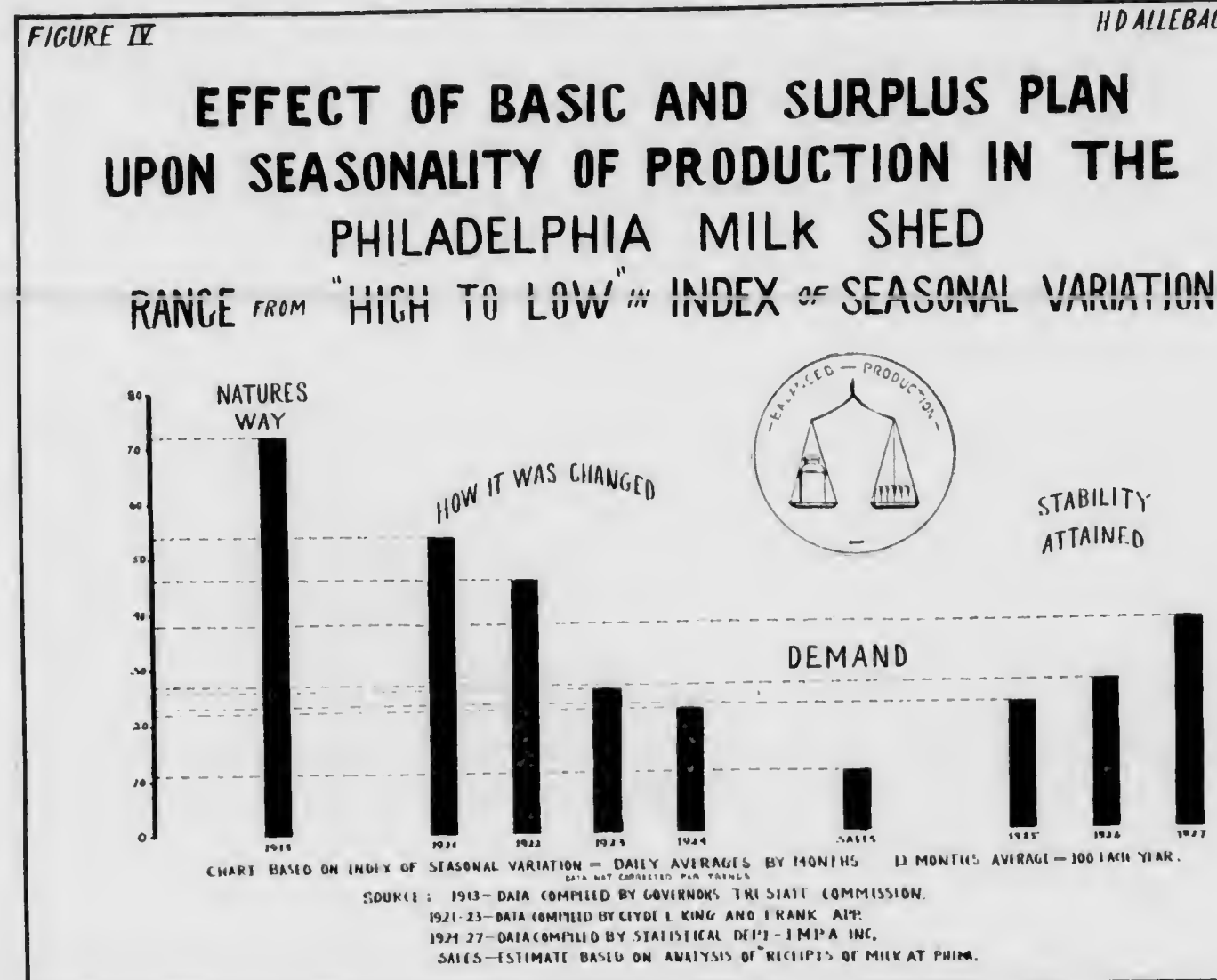
Thus far we have covered what we feel are the essential requirements for the set-up of a cooperative milk marketing organization.

## The Inter-State Milk Producers' Association, Inc.

The Inter-State Milk Producers' Association covers 59 counties in four states, with 285 locals, and we have signed up 25,586 members.

A board of directors, twenty-four in number, is elected from the membership to represent the producers in the entire milk shed, and one-third of them are elected at each annual meeting. They serve for three years. Through this method there are always left with the Board, two-thirds of the old directors who are familiar with the proceedings.

Our entire association is affiliated with the National Cooperative Milk Producers Federation with headquarters at Washington, D. C. To this organization we contribute 10c per year for each active member of the Association.



See page six for description of this chart

While these directors are elected at large and the Constitution and By-Laws do not state they must come from any one section, so far they have been distributed over the territory geographically, so as to include a representation from every part of our district.

The Board of Directors elects annually from its members a President, and Vice President. It also elects a Secretary and a Treasurer who may or may not be members of the Board. It also has an Executive Committee of seven of which the President and Vice President are members. This Executive Committee also functions as the sales agency for the Association.

The Inter-State Milk Producers' Association is financed by a commission of 2c per hundred pounds from its members' milk. This deduction is made from the price agreed upon. Our price list always carries the net price to the producer. This commission is collected and forwarded our organization by the buyer.

The Dairy Council is financed by a similar method. The deduction of 1c is made from the computed price. This is collected and forwarded by the distributor to the Dairy Council, together with one cent of their own funds.

The Quality Control Department is financed by a deduction of 2c per hundred pounds on all milk purchased from non-members, which is deducted from the computed price. This is also collected by the distributors and turned over to that department.

## Results

For 12 years, collective bargaining has been a definite function in the process of production, distribution and consumption of milk in the Philadelphia Milk Shed. What has been gained as a result of this addition to marketing process?

Farmers have gained a voice in price determination; they have gained representation in the councils of the industry; they now have qualified agents

to look after errors in payment and weighing and testing, which formerly were either uncorrected or involved much expense and trouble to the individual producers to correct.

Greater than the gains from this improvement in administrative details has been the establishment of a price known and open to all of its members. Price is now known in advance of selling and producers have assurance that it will be fully guarded by representatives in constant touch with market conditions. Full attention can now be given to producing, with confidence that a market will be available and that prices will be fair and equitable.

Discouragement has given way to confidence in the future of the dairy industry.

Distributors have gained assurance of a steady supply, one that is produced in accordance with the requirements of demand. They can now deal

with authorized agents who represent producers that are satisfied and who are anxious to produce a product which meets high standards of quality. Distributors know what their cost for raw material will be; they gain increased satisfaction that a uniform price is established for all buyers alike, and that no one of them need make "special deals" in order to hold producers.

Consumers have gained assurance of an adequate supply of milk—life's most vital food. They know also that producers and distributors are jealously guarding the quality of that milk throughout the process of production and distribution and that producers and distributors are united in efforts to furnish consumers with milk of unimpeachable safety at fair and reasonable prices.

\*Address presented by H. D. Allebach, President Inter-State Milk Producers' Association, at the American Institute of Cooperation, University of California, Berkeley, California.

## Soil is the Raw Material in the Farmer's Factory

Comparing the farm to a factory in a recent publication by the United States Department of Agriculture, the authors, A. T. Wiencek and S. D. Conner, say: "The farmer should know his soil and have a sound basis for every step in its treatment. Building up the productivity of a soil to a high level and then maintaining it, is an achievement for which every farmer should strive. The business of farming should be conducted as intelligently and as carefully as a manufacturing business. Every process must be understood and regulated, from the raw material to the finished product, in order to be uniformly successful. The farmer's factory is his farm. Different soils present different problems. It is important, therefore, that soils be studied and understood in order that the production of crops may be most satisfactory and profitable. No system of soil management can be satisfactory that does not in the long run bring profitable returns. Some soil treatments and methods of management may be profitable

for a time, but ruinous in the end. One sided or unbalanced soil treatments have been altogether too common in the history of farming in this country. A properly balanced system of treatment will make almost any soil profitably productive."

## Dairy Cows Produced 422,260,000 Gallons in 1927

Dairy cows in the state of Pennsylvania produced over 422,000,000 gallons of milk in 1927, valued in excess of \$109,780,000, according to estimates made public by the Bureau of Statistics, Pennsylvania Department of Agriculture. Milk is regarded as the most valuable of any product produced on Pennsylvania farms and is said to be the principal source of farm revenue in more than half of the counties.

More and more of the milk produced each year is being sold as whole milk and less is being made into butter. There were almost 100,000,000 more gallons of milk but only one-third as much butter made on farms in 1927 as in 1909.

## Many Counties Engage in 4-H Club Activity

Continued activity in 4-H club work are reported by A. L. Baker, state club leader of the Pennsylvania State College.

Forty-five boys are in acre potato clubs in Potter county and all are determined to grow 400-bushel yields, Baker said. The club members are being financed by the various banks of the county.

Cumberland county has enrolled 298 club members, which is said to be the largest county enrollment reported. Practically every community is represented, and the young farmers are growing baby beef, pigs, strawberries, corn, and potatoes.

Dauphin county acre potato club boys are running a series of fertilizer tests. Starting with no fertilizer on two rows 300 feet long they will use a complete fertilizer on similar areas at the respective rates of 500, 1000, and 1500 pounds per acre.

In Lancaster county the Lititz garden club is entering on its third year of work.

The Nazareth pig breeding club in Northampton county has seven members who will attempt to produce ten litters this year. Two litters of 12 pigs each, one of 10, two of 9, and two of 8 pigs each are reported.

## Cooperative Purebred Dairy Sires Increase

Twenty-nine new cooperative bull associations are to be added within the next few months to the 70 now in operation in Pennsylvania, says S. J. Brownell, dairy extension specialist of the Pennsylvania State College. These will contribute additional strength to the dairy herd improvement program which is proving so popular and profitable in this state. Twenty-one counties are represented by the groups now being organized.

Mercer county recently organized three new associations, one each of the Jersey, Guernsey and Holstein breeds. Plans for another Holstein and an additional Jersey association are now in progress. Mercer county was the first in the state to have such organizations, two being started in the Grove City area in 1916.

Pennsylvania is first among the states in this work. Butler with nine associations, leads all counties of the country. There are 28 bulls in these groups. McKean county has eight associations with 86 sires. This county has all the major dairy breeds except Brown Swiss represented.

Are your crops properly proportioned for greatest returns?

## 4-H Clubs at Memphis

The program for 4-H Club boys and girls at the National Dairy Exposition, to be held in Memphis, Tenn. in connection with the Tri-State Fair has been enlarged greatly this year according to the Club Department booklet which is now being issued.

Teams of boys and girls will again participate in a dairy cattle judging contest which opens the Club activities on Monday, October 15th. Demonstration contests begin that day and continue for three days will be divided into two sections, one on breeding, growing, feeding, fitting and showing dairy cattle, and the other on production, consumption and marketing of milk and dairy products.

The new classification for Club cattle includes three classes according to age for individual animals and a group class in each of the five dairy breeds. The five dairy cattle organizations participate in the prizes offered in this division.

Boys and girls attending the Exposition will camp on the grounds from October 14 to 18. A busy schedule of events is planned to provide instruction, recreation and amusement during their stay at the Exposition.

The program this year offers more attractive and useful activities.

## Says Doping Healthy Animals Is Worthless

"Nothing is to be gained by dosing and doping apparently healthy animals, including poultry, with unnecessary and ill-advised stock conditioners," asserts Dr. T. E. Munce, director, Bureau of Animal Industry, Pennsylvania Department of Agriculture.

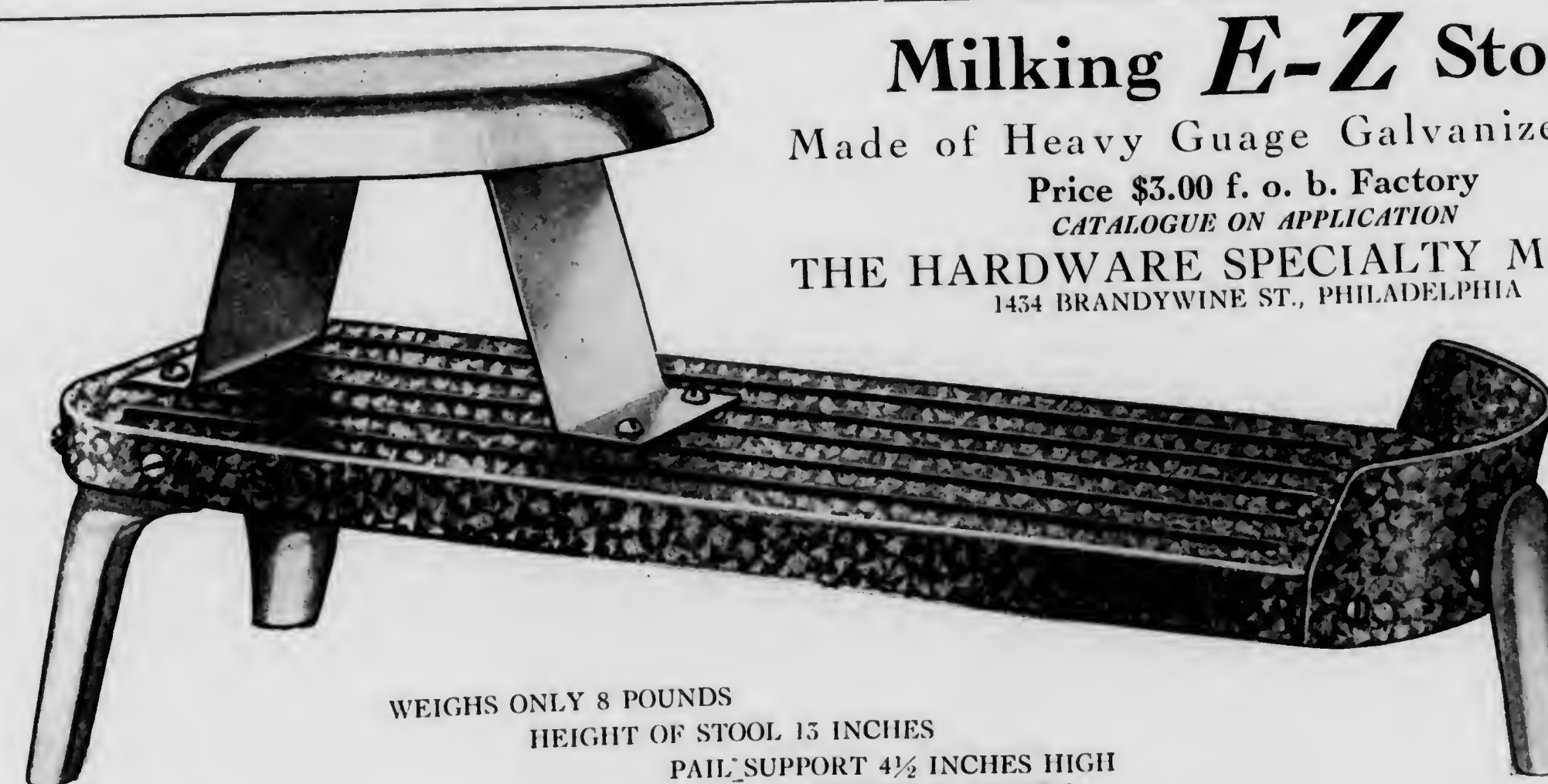
This public statement is made after receipt of inquiries about a manufacturer of a so-called stock conditioner who offers free veterinary service to his regular customers.

"Sick animals and poultry should be examined and treated by a local veterinarian," Dr. Munce adds. "Remember that some one must pay for the so-called free service and a careful analysis of the proposition submitted should enable any business man to determine that in the end the owner of the animals pays the bill."

"Owners should strive to keep their animals and poultry healthy by feeding them a properly balanced ration and through proper housing, care and handling."

## Give Cows Comfort

Plenty of clean, fresh water and protection from flies and heat are summer necessities for the dairy herd.



**Milking E-Z Stool**  
Made of Heavy Gauge Galvanized Steel  
Price \$3.00 f. o. b. Factory  
CATALOGUE ON APPLICATION  
THE HARDWARE SPECIALTY MFG. CO.  
1434 BRANDYWINE ST., PHILADELPHIA

WEIGHS ONLY 8 POUNDS  
HEIGHT OF STOOL 15 INCHES  
PAIL SUPPORT 4 1/2 INCHES HIGH  
LENGTH 26 INCHES

## TWO REASONS WHY

YOU SHOULD READ EACH ISSUE OF

## The Inter-State Milk Producers' Review

**FIRST**—It will keep you posted on market prices and conditions. It will keep you in touch with the trend of the milk market.

**SECOND**—Read the advertisements in the Milk Producers' Review. Read them all in a leisure moment. You may find something advertised that you need, and when writing to advertisers always mention the fact that you saw the advertisement in the Milk Producers' Review. Advertisers like to know just where you saw their Ad.

## Population Increases Faster in Pennsylvania Than Farm Production

So rapidly is the population of the Commonwealth increasing that farmers in Pennsylvania have not, in spite of all the improved methods, kept pace in the production of food products, says the Pennsylvania Department of Agriculture.

While production per farmer of important farm crops has increased 40 per cent in the last 50 years, nevertheless population has increased so fast that, if this total production today were distributed equally among all the people, each would have 40 per cent less Pennsylvania grown farm produce than each had a half century ago, studies made by the Bureau of Statistics reveal.

The population has increased approximately 6,000,000 since 1870 while the production of wheat, for example, has increased only 5,000,000 bushels, which means that the per capita production has decreased from almost five bushels to two bushels. The present per capita consumption is estimated at more than

four bushels. The production of potatoes, however, has almost kept pace with consumption by an increase of 14,400,000 bushels.

Pennsylvania farms come nearer meeting the demand within the Commonwealth for apples, potatoes, milk and eggs than they do for wheat and meat.

## Decrease in Number of Pennsylvania Dairy Cows Overcome

The decrease in the number of milk cows apparent since the World War, was stopped during 1927 when the number actually increased 10,000. Likewise, improved breeding, better feeding and tuberculosis eradication have in part at least resulted in an increased annual production per cow of from 40 to 50 gallons of milk during the past eight years. This increased production and the greater demand for dairy products and good breeding stock have increased the average value of the cow to \$103, \$5 more than the highest average price reached during the War.





### What the Old Gingham

#### Dress Can Do

A dressing table for your bedroom. Every woman has apparently useless old dresses hanging in the back of the closet. Perhaps they have a tear in them or maybe they are still good but a little out of date. It's those very dresses that will give you what you might have previously thought of as a luxury and an unnecessary expense—the dressing table.

"A dressing table for a can of paint." Isn't that just enough to start one thinking where one would put it and what colors would harmonize with the room and the old dresses to be used.

Two packing boxes about 15"x23", an old board, twice or more as wide as the side of the box, a can of paint, your old dress and you have just what you wanted.

Set one box on top of the other so that the open spaces correspond, making two shelves. Fasten these together, either with nails or hooks at each side. Then you are ready to nail the flat board on to making the top of your dresser. By laying this board project from the boxes one has room for the feet when using the dressing table.

Paint comes next. Be sure to choose a harmonizing color. When this dries you are ready to tack your draperies around the sides. Here is where the dresses come to the rescue. A figured and a plain dress maybe combined in alternating strips, if one does not have enough in one dress to make the drapery. An old dress will also make attractive dresser covers.

Your results should be a dressing table fit for any Queen and an addition of cheerfulness and usefulness to any bedroom.

### The Banana an Excellent Food When Fully Ripe

For a long time the banana has been labelled as an indigestible fruit. The foundation of this traditional fear has been shattered. Like so many other things, the banana has lately been a subject of research and experimentation. After all the weighing on the scales of science it stood the test and was "not found wanting."

In fact, now it is endorsed by many doctors even for infant feeding, and one has said, "Banana and milk are a good team," indicating that the two foods make a highly nutritional dish.

The eating of a banana in the unripe stage is the reason why it has been popularly known as "indigestible" and so often referred to as a concentrated essence of stomach.

When is the banana fully ripe? The truly ripe fruit is thoroughly mottled with little brown dots on the yellow skin and there is no trace of green at either tip. At this stage the carbohydrate of the banana is changed into an easily digestible form.

Keeping the banana in the refrigerator is one of the most common mistakes made. The cold prevents the ripening and developing of its best flavor. The fruit ripens best in a room of moderate temperature.

### The Going of the Table Cloth

"Ha, Ha, no doilies in this house. My men folks laughingly ask about patches on the table. They may be labor savers, but I cannot see it. I'd rather iron a table cloth any week than all those little patches. No we do not care for them." So spoke my hostess. Time passes rapidly; five years have gone. I visit the same home and am surprised on going to lunch to find the table most attractive with a set of blue bird doilies.

I refrained from any reference to our former conversation, but as we chatted freely, as real friends do, I found a changed attitude on table cloths and doilies, attractive, labor-saving, an opportunity to change color scheme frequently.

The styles are innumerable. Perhaps the easiest to use in every way are the pretty painted or stencilled ones on oil cloth or sanitos. If a light colored background is used they make a cool looking, attractive table, while a damp cloth and a dry one to wipe them off and "presto" they are ready for putting away in the side board drawer.



### The Health Car and How it Operates

The health car is coming to town! What could be more helpful news to the family who has several children who will enter school this fall?

Such a car is sent out by the State Department of Health of Penna. It has the unique and distinguished mission of working only for the rural communities throughout the counties of the State.

For the last three summers this message of health and advice has been carried into thousands and thousands of homes through the parents' contact with the Health Car. In one year over 15,000 examinations alone were made. This year in just one county 1259 children were examined and 1,000 children had their teeth cleaned. Among the thousand who had their teeth cleaned 4500 cavities were found and every mother urged to have her child's teeth attended to immediately.

Round ones are possibly liked best and of any material one fancies—unbleached muslin, butcher's linen, Indian head, Japanese crepe—to say nothing of real linen, white or in colors. These may be button-holed around or a very plain, simple crocheted edge, if a fancy touch is desired.

Perhaps I like best Japanese crepe—the color to blend or contrast with dining room furnishings. These may be fringed out 1/2 inch, with napkins to match. But I like best these made rectangular about 9 x 14 inches with hem—the hem held in place by darning stitch done with black silkaten. These are most attractive and very easily laundered.

After this discussion of color schemes, service, labor saving, my friend laughs, her jolly laugh saying, "no more ironing 3 yard table cloths on hot summer days. I enjoy my freedom from this too much. Oh, yes, my table cloth comes out when I have invited dinner guests then we enjoy the luxury, but for quick work, real labor saving, I am using all the short cuts possible and easy table covers is my hobby."

### Table Etiquette

"Does the napkin belong on the right or the left of the plate, and where shall I put the salad fork?"

How many times most of us wonder whether our habitual way of setting the table is the correct and accepted method. Here is a good practice.

Test your table etiquette on the following points:—

Place silver and plates one inch from edge of table.

Knives should be placed at right, sharp edge toward the plate.

Forks should be placed at left, tines up. Spoons should be placed beside knife, bowl up.

Place silver in order in which it is to be used.

The tumbler may be placed at the point of the knife.

Bread and butter plate is placed in front of the fork.

Napkin should lie to left of fork with the corner toward plate so it may be placed in the lap easily.

Place all dishes before the guest from the right.

Pass all dishes from which food is to be taken at the left.

Remove first all dishes containing food, then all soiled dishes, taking the entire service from one person at one time. Never stack or pile dishes.

Remove all dishes from right when convenient, and do not reach in front of guest.

Serving silver is placed parallel to the other silver.

Chairs should be placed so that the front edge of each chair touches or is just below the edge of the table cloth.

Guests follow the lead of the hostess.

### "Food Habits for the Two-Year Old"

"An ounce of prevention in childhood is worth pounds of treatment in manhood."

No good contractor uses cheap material to erect a beautiful building, nor does he begrudge the time given to close and careful supervision of its construction. In the end his result is a beautiful edifice—made to stand the wear and tear of ages.

No thoughtful parent who has the building of a beautiful human life can neglect their duty of seeing that proper habits are formed—so that in the end this child of two may also be able to stand the wear and tear of years.

The second year in a child's life is the corner stone for the forming of good food habits—good training during this period will lighten future problems—and only through undue patience and firmness will it be successful. The parent, especially Mother, will meet constant obstacles.

"Baby's food for baby." One of the most embarrassing problems comes when an older member of the family or a friend offers baby just a "taste of this" or a "sip of that" because he looks so cute when he makes a funny face at the strange flavor. This, by no means,

(Continued on page 11)

### Food Habits For the Two Year Old

(Continued on page 10)

should be tolerated. Mother's hospitality and respect will be deemed much higher in the end if she is quite firm in her refusal and baby will be none the wiser and so much the happier and healthier.

The most common mistake of this age is the introduction of too many kinds of foods. The diet should continue to be very simple. When new foods are added give only one at a time. The new foods are not always liked at first, but this may be gradually overcome through repetition and introducing them only when the child is in good health, rested and hungry. The feeder must be cheerful and not in a hurry. The number of meals are reduced to four—three at the time the family gathers, or a little later if Mother prefers, and a mid-morning lunch. The meals should be regular—whatever adjustment is made.

A quart of milk a day still continues to be the most important item for bone and tooth building. Some of this may now be used in cooking—as in the making of cream soups, junkets, custards and creamed vegetables. Unstrained cereals may appear twice a day—and for variety two different kinds may be served. The whole grained cereals as oatmeal, wheatena and pettjohn are best.

Shall sugar accompany the cereal? There is no need to add sugar and it is a poor policy to develop a taste for sugar in the younger child. One so often disguises the real nutty flavor of cereals by adding it. Sugar also tends to depreciate the liking for other foods of a milder flavor. So use sugar cautiously.

Egg yolk is a valuable part of this year's diet as well as those to come. The white of the egg is good but not needed as much when plenty of milk is used.

Fruit juices may be increased to three tablespoons—given preferably at the mid-morning feeding. Fruits such as prune pulp—cooked apple and pear sauce, and pineapple and fresh peach juice also make excellent desserts.

Mild, strained vegetables as spinach, carrots, string beans, green peas may be given now in one to three tablespoon amounts—while the potato, either baked or cooked in the jacket is always a favorite dish. With this exit from babyhood into childhood, parents must intelligently guide the building of their child's "house of life."

### Philadelphia Inter-State Dairy Council Incorporated

General Offices  
Flint Building, Philadelphia

A cooperative movement established for the dissemination of information and publicity pertaining to the production and distribution of dairy products and their food value in nutrition.

Affiliated with the National Dairy Council

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## Farmers Cooperatives, Do \$46,764,108 Business in 1927

More than 22 per cent of the farmers in Pennsylvania cooperated last year to buy and sell products and supplies valued at \$46,764,108 in 1927.

This is the largest cooperative business ever done by farmers in the history of the Commonwealth, says H. A. Hume, man of the Bureau of Market. The 1927 volume was an increase of 32.9 per cent over 1926 sales and a 51.2 per cent increase over the 1925 total.

### More Milk Sold

The greatest increase in business in 1927, as compared with 1926, took place in the cooperative marketing of milk, as the sale of milk and milk products increased \$9,213,074 or 32.3 per cent. Much of this growth was due to a higher average price for milk during 1927 than in the preceding year, but all of the milk marketing organizations also handled a greater volume of milk than in 1926.

Particularly significant is the increase in sales of milk from Pennsylvania dairymen through the cooperative associations supplying Pittsburgh, Philadelphia and New York. The increase in every case amounted to 15 per cent or more. Likewise, most of the local milk distributing plants showed an increase in both volume of milk handled and in sales while most of the local creameries showed a decrease.

The value of fruits and vegetables sold cooperatively was 12.1 per cent greater than in the previous year although the actual volume of fruits handled by cooperative associations was considerably smaller because of the short crops in 1927. Egg sales increased in volume and in dollars, but wool sales by incorporated pools decreased 26.9 per cent. (Only one-third of wool sold cooperatively is handled by incorporated associations, the remainder being sold through unincorporated pools.) Sales of livestock by cooperative associations during 1927 amounted to \$132,000 and most of the business transacted was in dairy cattle.

Sales of farm supplies by cooperative associations were 17.8 per cent larger in 1927 than in the previous year. Their growth was due to an increase in the number of associations handling supplies, to an increase in business of the interstate organization operating in Pennsylvania, and to an increase in the sales of many local associations.

### Increase in Membership

The total Pennsylvania membership of cooperative associations at the close of 1927 was 44,974 more than one out of every five farmers in the Commonwealth. This is an increase of 1.1 per cent over the total membership at the close of 1926.

Since 1919 when the law legalizing non-stock cooperative associations was enacted, cooperative business among farmers has made rapid progress. Each year, the Bureau of Markets analyses the annual reports of all cooperative associations organized under the 1919 law, and makes the results available to the managers and directors of all these organizations to be used in promoting greater efficiency in their business.

### Pick Show Cattle

Now is the time to select the dairy animal intended for exhibition at the fall fairs. They should be fed well during the remainder of the summer, groomed daily, and taught to lead and stand.

## Eleven Billion Pounds Milk Marketed Cooperatively

Approximately eleven billion pounds of fluid milk was marketed through cooperative associations in 1927. This quantity is nearly one-fifth of the estimated quantity used in the United States for household purposes last year.

A large fraction of the total fluid milk used in some of the larger cities passes through cooperative channels in moving from producers to the consumers. Such is the case in Philadelphia, Baltimore, Washington, New York City, Hartford, Boston, Pittsburgh, Cleveland, Cincinnati, Detroit, Minneapolis, and other cities.

There are three general types of cooperative enterprises engaged in marketing fluid milk. These are the producers' bargaining association, the producers' distributing association, and the consumers' distributing association. The bargaining association functions chiefly in the determination of the monthly price to be paid by private distributors to the producers. About sixty per cent of the fluid milk marketed cooperatively is under the control of the bargaining associations. It is this type of association which operates in the larger cities.

The producer-operated distributing association assembles, processes and delivers milk to consumers, such as hotels, restaurants and private families. About 40 per cent of the milk marketed cooperatively is handled by this kind of producers' organization. In general these distributing associations operate in the small cities, although there are producers' associations distributing milk at retail in a few of the very large cities.

At the present time there is but one outstanding consumers' cooperative for handling fluid milk. This is an association serving the residents of Minneapolis. The enterprise buys its supply of milk from a producers' association, puts it in bottles and distributes it to the homes of its members and others.

Such data as are available indicate that the quantity of fluid milk handled by the cooperatives has been increasing rapidly during the last three to five years. Reports collected by the Department of Agriculture for 1924 and 1927 show a substantial increase in quantity for the latter year as compared with the former.

### Use of Lime in Pennsylvania

Information recently compiled by the Bureau of Statistics of the Pennsylvania Department of Agriculture indicate that the larger percentage of farmers in that state used lime for agricultural purposes during 1927.

Estimates show that 379,810 tons of lime were used on the farms of the state—at an aggregate value of \$3,378,280 as compared to 357,185 tons, costing \$3,082,920 in 1926.

The application of lime to soil is especially profitable, farmers in most parts of Pennsylvania report. They have found that clover and other legumes will not grow satisfactorily on sour soil and likewise, that the production of other crops is enhanced by an application of lime. Farmers are being urged, at this time, to use lime in even greater quantities because it pays good dividends.

A child who is worried, irritated, unhappy or over-tired at meal time cannot digest his food properly.

## COW TESTING ASSOCIATIONS

A. L. Waddington, Woodstown, N. J., (a son of A. B. Waddington, a Director of the Inter-State Milk Producers' Association) recently ranked second in the cow testing herd of Salem County, New Jersey Association.

His cows averaged 10,683 pounds of milk and 376.6 pounds of butterfat per cow. There was but one higher record for the month, that of J. W. Ridgway, whose herd averaged 11,174 pounds of milk and 397 pounds of fat.

Mr. Waddington's cows, which are free from tuberculosis, made the following record:

Jewel	16,058	595.3
Ida	14,491	481.
Neola	14,215	485.
Grace	13,476	486.8
Willda	13,697	487.9
Thelma	12,950	470.3
Lora	12,913	476.9
Mary	11,021	388.4

Sixty-five cow testing associations in Pennsylvania during June reported 22,225 cows tested, 3,919 cows producing more than 40 pounds of fat and 4,963 gave more than 1000 pounds of milk. Of the 40 pound group 1,218 cows produced more than 50 pounds of fat and 2,592 cows gave more than 1200 pounds of milk. During the month 170 unprofitable cows were sold. Twenty-six bulls were purchased during the month.

The highest three individual cows in Milk production were:			
Owner	Breed	Association	lbs. milk
1—Bell Farm	R. H.	Allegheny	2922
2—Mast Stoltfus	R. H.	Gordon Spot	2640
3—Robert Heess	R. H.	West Sullivan	2628

The highest three individual cows in butterfat were:			
Owner	Breed	Association	lbs. fat
1—H. H. Packard	R. H.	Troy	100.1
2—J. H. Siloils	R. J.	Westmoreland	96.1
3—J. P. Canby & Son	R. H.	Bucks No. 1	93.1

Montgomery County Cow Testing Association, No. 1, with nearly 400 cows on test, in 24 herds shows the following report for June, 1928:

Sixty-six cows qualified for the honor roll, having produced over 40 pounds of fat. Sixty-five cows produced over 1000 pounds of milk and 37 went above the 1200 pound mark.

The highest butter fat record was made by a cow owned by Shipley School, which produced 1623 pounds of milk and 78 pounds of butter fat.

A registered Holstein, Pauline, owned by J. L. Wood and Sons, of Red Hill, was second highest with 1,803 pounds of milk and 74 pounds of butterfat on two milkings a day. A registered Holstein, owned by J. Landis of East Greenville, was the highest in milk production with 2,202 pounds of milk and third in the butterfat production with 72 pounds on three milkings per day. A Jersey, Buttercup 3rd, owned by C. William Haywood, of Ambler, was fourth in butterfat with 60 pounds for the month.

### Herd Honors

The honors for the highest herd average milk production go to a herd of 13 registered Holsteins owned by H. L. Baker, of Norristown, R. D., with an average of 1,063 pounds of milk for the month. A registered herd of 18 Holsteins owned by Ursinus College was second with a herd average of a thousand pounds of milk for the month.

The highest herd average butterfat production was made by a herd of 15 registered Jerseys owned by W. C. Randolph, of Royersford, R. D., the herd owned by the Shipley School, of Gladwyne, was second with a herd average of 37 pounds of butterfat. The H. L. Baker Holstein herd was third with an average of 36 pounds of butterfat for the month. Other herds that averaged over a pound of butterfat a cow for each day during the month were Willow Creek Farm, Spring House; C. William Haywood, Ambler; Cathart and Davis, Hatfield; Ursinus College, at Collegeville; William H. Landis, East Greenville and J. L. Wood and Sons, of Red Hill.

A list of herd owners with cows that qualified for the honor roll for having produced over 40 pounds of butterfat for the month: Shipley School, Gladwyne, two registered Guernseys and one registered Holstein; J. L. Wood and Sons, Red Hill, six registered and grade Holsteins; C. William Haywood, Ambler, seven registered and grade Jerseys; William H. Landis, East Greenville, and H. L. Baker, Center Square, each three registered Holsteins; W. C. F. Randolph, Royersford, R. D., four registered Jerseys; Mrs. Howard Bieler, E. Greenville, one registered and one grade Holstein; Normandy Farms, Gwyned Valley, four grade Holsteins, one Grade Brown Swiss, one grade Jersey and one grade Shorthorn; Ursinus College, Collegeville, six registered Holsteins; A. L. Bailey, Gladwyne, and Cathart and Davis, Hatfield, each one registered Jersey; C. E. Longacre, Royersford; Will Creek Farm, Spring House, and Camp Discharge Farm, at Conshohocken, each four registered Guernseys; Levi Schultz, Estate, at Palm, four registered and grade Holsteins; Harvey Murphy, Norristown, R. D., one grade Holstein and William Pfommer, Red Hill, one registered Holstein, A. D. Hunsicker, Royersford, R. D., three grade Holsteins; H. D. Allebach, Trappe, four registered Holsteins.

### Keep Up Milk Flow

To maintain a good milk flow during the fall months, extra feeding of green feed or grain, or both, should begin now or as soon as pastures begin to get short.

Uncle Ab says that if he didn't take a part in his community he wouldn't be taking much of a place in life itself.

When scenery is mutilated, everybody loses.

## Prof. O. E. Reed New Chief of Bureau Of Dairy Industry

Prof. Ollie E. Reed, head of the dairy husbandry division of the Michigan State College of Agriculture, has been appointed chief of the Bureau of Dairy Industry of the United States Department of Agriculture. He will take up his duties in Washington about September 1. The position has been vacant since the first of the year when Dr. C. W. Larson resigned to become director of the National Dairy Council.

Prof. Reed is generally recognized as one of the outstanding men in the United States in the field of dairy education and dairy research, said Secretary Jardine in making the selection.

The new chief has been professor of dairy husbandry and head of the dairy department at the Michigan College since 1921. He held similar positions at the Kansas State Agricultural College from 1911 to 1918, and at Purdue University from 1918 to 1920. He was vice-president of the American Dairy Science Association in 1920 to 1924, and president in 1925. He has studied the dairy industry abroad and is one of the American Congress recently held in England.

Professor Reed was born in 1885 at Fayette, Mo., was reared on a farm, and was graduated from the University of Missouri in 1908.

The Bureau of Dairy Industry was formerly a division of the Bureau of Animal Industry and still co-operates very closely with that bureau in many aspects of its work. Owing to the great importance of the dairy industry to the health and welfare of the people and the large amount of work to be done in improving methods of production and manufacture of dairy products, the improvement of breeds, feeding methods, and methods of handling and marketing dairy products, the division was enlarged to the present Bureau of Dairy Industry in 1924 and is now one of the principal dairy research organizations in the world.

## Scout Entire State For Japanese Beetles

Practically the entire state outside the present quarantined area will be scouted this summer for new infestations of Japanese beetles.

The scouting work, a part of the general program to check the spread of the beetle which is undertaken co-operatively by the Federal and State Departments of Agriculture, is now under way with approximately 50 men stationed in various parts of the Commonwealth of Pennsylvania.

The scouting crews searching for new infestations have headquarters at the following points: Altoona, Pittsburgh, Montoursville, Bushkill, Liverpool, Scranton and Chambersburg. Other crews concerned with determining the extent of beetle infestation in nurseries and greenhouses in the quarantined area, have headquarters at Lancaster, Bloomsburg, Oxford, Norristown and Allentown.

For effective scouting work, the State is divided into five districts, each district having a supervisor. These supervisors are stationed at Norristown, Lancaster, Harrisburg, Milton and Scranton. Whenever new infestations of beetles are found they are reported to the district supervisors and from there to the State headquarters at Norristown.

## July Hog Outlook

The supply of hogs that will be available for market during the next twelve months is expected to be considerably less than during the past year, says the Bureau of Agricultural Economics, United States Department of Agriculture. The indications are that both the domestic and foreign demand for pork products will show some improvement.

With better prospects for a corn crop than prevailed a year ago and the upward movement of a new hog price cycle underway, the Corn-Hog Price ratio is expected to become more favorable for hog production. A production maintained at the level of 1925 and 1926, representing an expected slaughter of around 42,000,000 head promises the best return to the producer of both corn and hogs.

The preponderance of available evidence as to the market supplies of hogs for the four months, July to October, points to a slaughter about as large and possibly somewhat larger than during these four months last year.

### Winter Prices

The Bureau further states that the supply and demand points to a higher level of hog prices in the winter of 1928-1929 than the average of \$8.34, made last winter, but it hardly seems likely that prices will reach the average of \$11.75, attained in the winter of 1926-1927. Present conditions point to a comparatively light market supply of hogs in November and December. In this event it seems probable that the seasonal decline in prices will be much less than that which took place last year, and that the low point of the winter prices, which is usually reached in early December, will be considerably higher than the low point of the winter of 1927-1928.

## Produce Commission Merchants Must Ac- count on Basis of Sales

Produce agents in all instances should account to shippers on the basis of prices actually received in good faith from third persons, declares the Bureau of Agricultural Economics, United States Department of Agriculture, in response to inquiries regarding this particular accounting feature under the Produce Agency Act. The bureau bases its position on the fact that the Supreme Court of the United States, as well as the State Courts, have held that an agent to sell can not sell to himself.

The point has been raised as to whether an agent who is making sales on track, charging therefore a commission of, say, 7 per cent, and who takes own store for sale, must account on the basis of the price received through the store, or may account on the basis of the price received on track. Obviously, under the policy outlined above, the bureau says, the agent must make his returns on the basis of the price received for sales through the store for the portion so sold, while returning on the basis of track price for the portion actually sold on track.

The bureau points out that this does not compel produce commission merchants to handle produce through their stores at 7 per cent, or whatever the track sales commission may be, but that such merchants are entitled to the commission that is usual and proper for sales made through the store.

Uncle Ab says that if you keep on the level, you are likely to climb higher.

## Has the milk flow been going down?

The backbone of summer is broken. Nights are longer and cooler but it is hot at noon—and flies are still bad. How are the cows standing? Have they lost flesh and has the milk flow been going down steadily? Cows entirely dependent on pasture for their feed need building up—especially those that are to freshen in the autumn. Fall calving cows need particular attention right now, for they are the ones you will depend on largely to keep up the size of the milk check until after the first of the year.

In getting cows ready for winter nothing can take the place of old, reliable UNION GRAINS. It will put that highly desirable soft fat under the skin and make it pliable and the hair soft and silky. When properly fed with UNION GRAINS cows are better conditioned and fresher



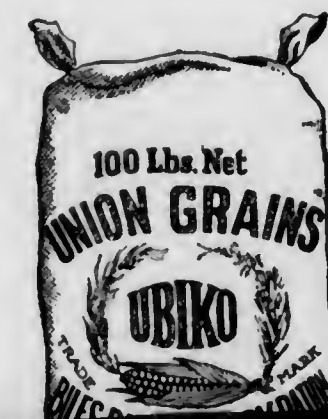
without such troubles as retained afterbirth, metritis and caked udders.

UNION GRAINS is such a good conditioner for winter because it is made especially for dairy cows. Its protein, the backbone of any dairy feed, comes from a variety of sources—dried brewers' grains, dried distillers' grains, a little from cottonseed, a good proportion from old process linseed meal and some from gluten feed. They keep the cow's digestive system in excellent condition and make the ration palatable and wholesome. All are combined in a way that gives perfect balance and keeps the cows in good health. Feed UNION GRAINS to your cows the year round. It pays—the milk checks prove it.

## UBIKO Dairy Service Bulletin Free

Our new bimonthly dairy service bulletin will be mailed regularly to dairymen and farmers who would like to have it. Every issue contains a helpful article on feeding or some phase of dairying by an authority on the subject. Address

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The most profitable dairy cow is one that has no tendency to put on flesh, has a good appetite and a large stomach, indicating good consumption and assimilation capacity.

### Forty Million Dollars Lost

"Cut, dig out and destroy all weeds," says Secretary of Agriculture C. G. Jordan. "Why? Because they cost the Pennsylvania farmers 40 millions of dollars annually. They are his worst foe. This is sufficient argument for their destruction."

"When should this work be done? 'Behold, now is the accepted time.' While in bloom, before the seeds form, grind your scythe, sharpen your hoes and get busy."

"Who should cut the weeds? All farmers; all owners or operators of uncultivated land (who are as a rule our worst offenders); the Highway Department; manufacturers; coal operators; railroad operators, both steam and electric; school directors; borough and city councils; and all other persons responsible for lands overgrown by weeds."

**State Law Requires Weed Cutting**  
"The law of Pennsylvania gives public officials the authority to cut and destroy two of our worst weeds—Canada thistle and chicory, and charge the cost to the owner of the land. My suggestion is that you cut your own weeds, save officials the trouble, and keep the money for the work in your pocket."

"Canada thistle and chicory are not the only destructive weeds. The ox-eye daisy is spreading very rapidly in Pennsylvania and should be cut or dug out before the seed forms. Wild mustard is practically taking thousands of acres of land in our Commonwealth. Get after it. The morning glory is a real pest in many localities. Turn your hogs in. They will dig out the large juicy roots as they seem to like them almost as well as corn. Quack grass should be hoed out or mowed down before the seed forms. Destroy the devil's paint brush before it devils you to death."

"George A. Stuart, of the Bureau of Markets, Pennsylvania Department of Agriculture, can tell you how to get rid of your wild garlic. Do you have wild carrots? Turn in your sheep and they will take care of them. Sheep are the best weed destroyers we have and also give the farmer his easiest money. They will clean up your farm and fill your pocketbook. Cows will take care of elder bushes and other brush and at the same time furnish cream for your strawberries."

### Crops Made Rapid

Progress in July

Crops generally have made rapid progress during the month of July, says the United States Department of Agriculture.

Growth has been favored by the frequent rains throughout the eastern part of the country, although this has interfered somewhat with haying and wheat harvesting.

July estimates of acreage indicated some increase in the total crop area over last year but the composite condition of the principal crops on July 1st was not quite up to the average.

The tendency of crop prices, the Department says, on July 26th, has been downward lately, including prices of corn, wheat, cotton and potatoes. However, the general price position of farm products stood at 95 in May and 98 in June, the five pre-war years representing par, that is 100.

As flies are inclined to go toward the light, traps set in bright places are most effective.

### Penna. Sells Over Billion

Pounds Milk Cooperatively

More than 1,184,913,000 pounds of milk were sold through cooperative marketing organizations operating in Pennsylvania last year, almost 225,000,000 pounds more than in 1926, according to statistics compiled by H. A. Hanemann of the State Bureau of Markets.

The 1927 cooperative sales represent 28.5 per cent of the total milk production which is estimated at 4,161,200,000 pounds. The estimate of production includes the milk which is used on farms or is made into farm butter and consequently the percentage of the total marketable milk which was sold cooperatively was considerably larger than 28.5 per cent.

The Dairymen's Cooperative Sales Company, the Inter-State Milk Producers' Association and the Dairymen's League Cooperative Association, which supply milk for Pittsburgh, Philadelphia and New York City, respectively, sold 94 per cent or 1,114,041,024 pounds of the total amount of milk marketed cooperatively. Local cooperative milk distributing plants and creameries sold 70,000,000 pounds or 6 per cent of the total quantity sold by farmers' organizations.

During 1926, 960,658,226 pounds of milk or 23.5 per cent of the state's estimated total milk production of 4,090,320,000 pounds was marketed by cooperative marketing associations. Local cooperative milk plants and creameries handled 7 per cent of the volume sold and the three large associations serving the big cities sold the balance or 93 per cent of all the milk marketed by farmers' associations in 1926.

### Feed the Dairy Cow

August is one of the danger months for the dairy herd. Pastures get short and many dairymen do not realize that their cows need extra feed. The herd should be watched carefully and if the milk flow shows a marked decrease or the cows begin to lose flesh, give green feed or hay with grain.

### Take Care of Calves

Calves on pasture should be visited frequently, and if the feed gets short they should receive grain or some other supplemental feed, say State College dairy specialists. A check in growth always is expensive because it dwarfs the animal and delays the time that the heifers should come into milk.

### Not Quite

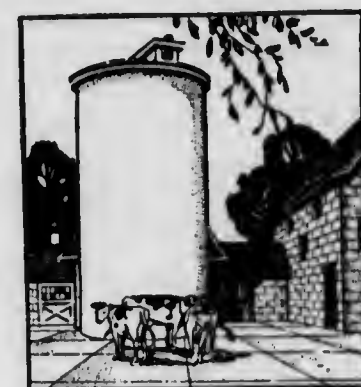
An American history class in one of the high schools has been having an interesting discussion of Civil war songs.

"Now," continued the teacher, "who can name a song inspired by John Brown's experience?"

"John Brown's body lies over the ocean," exclaimed one member of the class enthusiastically.

### for feeding calves

Do you know that you can cut milk costs in half by adopting the "minimum milk method," using dry skim milk? Hundreds of dairymen who sell all their whole milk are making this big saving. They simply mix a pound of dry skim milk with a gallon of water, making a money-saving mixture which young calves thrive on. And they buy a pound of dry skim milk for half of what they receive for a gallon of whole milk. (1 gal. whole milk contains 1 lb. milk solids.)  
**AMERICAN DRY MILK INSTITUTE**  
160 North La Salle Street Room 720-G  
CHICAGO, ILLINOIS  
**FREE** Write today for "Better Calves" bulletin. State number of calves you feed. We'll tell you where to buy skim milk.  
*Remixed—1 pound dry skim milk to 1 gallon of water—is also good for pigs and poultry*



## June Pastures in January

Silage is a winter feed fully as succulent and palatable as that in June pastures.

## Eleven per cent More Milk! Build a Concrete Silo

Tests at the Vermont Experiment Station showed that a ration including silage produced 11 per cent more milk than the same amount of dry corn fodder.

More milk during season of peak prices means more profit.

"Concrete Silos, Monolithic and Block" tells the whole story. Write for your free copy.

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A national organization to improve and extend the uses of concrete  
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## THROUGH ITS Dairy Cattle SHOW

THE  
TRENTON New Jersey FAIR

Has become the show-place of the East for pure bred stock. Both exhibitors and buyers profit through this easily accessible market and each year brings an increase in the number of sales made directly on the grounds.

This year's exposition will be held during the week of

**SEPT. 24-29**

Live Stock entries close  
September 11

Write at once for catalogue

J. FRED MARGERUM  
General Manager

## Extent of Bovine Tuberculosis Reduced One-Half in Six Years

The extent of bovine tuberculosis in every county in the United States, has been plotted by the Bureau of Animal Industry, United States Department of Agriculture, which portrays graphically excellent progress in combating this disease. This is based on the last of four surveys showing the per cent of tuberculosis among cattle to be as follows:

Year	Per cent of Cattle Tuberculous
1922	4.0
1924	3.3
1926	2.8
1928	2.0

The figures show that bovine tuberculosis has apparently been reduced one-half by the aggressive campaign of eradication conducted by Federal, State, and county authorities in cooperation with cattle owners.

The latest survey shows that areas heavily infected with bovine tuberculosis contain slightly less than 6 per cent of the cattle in the United States. In many of these areas moreover, vigorous campaigns of eradication are being carried on.

In discussing the progress made thus far, Dr. A. E. Wight, chief of the Tuberculosis Eradication Division of the Bureau of Animal Industry, said "this survey should be most encouraging to those identified with the campaign, not only the officials but all others interested in the livestock industry. The survey indicates, however, that there is still much to be accomplished before the campaign may be considered as completed. Comprehensive programs of work have been adopted in several States and have been of extreme benefit to the campaign. It is believed that all States should, so far as possible, adopt a definite program of work."

"Concrete Silos, Monolithic and Block" tells the whole story. Write for your free copy.

**PORTLAND CEMENT ASSOCIATION**  
A national organization to improve and extend the uses of concrete  
1315 Walnut St., Philadelphia  
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## Must Serve Milk In Original Bottles

Several prosecutions of proprietors of hotels, restaurants and dining rooms have been necessary already this summer for not serving milk to patrons in the capped bottles as delivered from the dairies.

This has prompted Dr. James W. Kellogg, director-chief chemist of the State Bureau of Foods and Chemistry to issue the following statement:

"Owing to the danger of the contamination of milk during the summer months, special agents of the Bureau are giving their attention to the enforcement of the Milk Container Law, which requires all milk sold for drinking purposes to be dispensed in the original bottles supplied by the dairies to hotels, restaurants and dining rooms.

This means that original bottles filled and capped by the milk distributors shall be served without removal of caps and not the use of bottles filled by food-dispensing places from bulk and served either with or without caps.

"The health of the public can only be protected and contamination of milk prevented by a strict adherence to the requirements.

"It has been necessary recently to bring several actions against persons dispensing milk which was not served in the original container received from the dairies but which was served in bottles which were filled from bulk in the kitchens of the hotels or restaurants.

## Third Annual Cumberland County Dairy Show

The third annual Cumberland County Dairy Show will be held at Mt. View Park, Mt. Holly Springs, Cumberland County, Pennsylvania, Wednesday and Thursday, August 22 and 23, under the auspices of the Cumberland County Holstein Breeders' Association, the Cumberland County Cow Testing Association, and the Cumberland County Agricultural Extension Association.

Seventeen classes of pure bred and grade Holsteins and Guernseys will be exhibited. There are six classes of males, eight classes of females, and three group classes. The latter consists of dairy herd, four cows in milk; produce of dam, two females, any age; and get of sire, four animals, any age, three must be females.

The judging of these classes will be done by Prof. A. L. Beam of the Dairy Husbandry Department of the Pennsylvania State College, beginning at noon on Wednesday, August 22nd.

A number of educational demonstrations will be given on Thursday, August 23rd, these demonstrations will cover some of the activities of the Cow Testing Association Work. These include: "The Economic Value of Dairy Mentality"; "The Best Way to Judge a Dairy Cow"; "Get-of-Sire"; "How Many of a Bull's Progeny Should be Shown?"; "Sanitation in Milk Production"; and a judging contest for adults.

In addition to the above demonstration work there will be an address by Dr. C. G. Jordan, Secretary of Agriculture of the State of Pennsylvania.

More than 200 cows of the best type and best producers in Cumberland County will be shown at this exhibition.

Everything is free to the public, and all lovers of good dairy cattle are cordially invited to attend the show. The show is strictly educational.

## Trenton Fair

The following announcement of Judges of livestock for the Tri-State Fair, to be held in Trenton, N. J., during the week of September 24th to 29th has been made by the Fair Management.

September 25th, Holsteins, R. E. Haeger, Algerquin, Illinois; Berkshires and Poland China Hogs, H. H. Havner, State College, Pa. September 26th, Brown Swiss Cattle, R. E. Haeger; Guernsey, W. K. Hephurn, Plymouth, Mass.; Duroc Jersey and Chester White; Hogs, C. E. Meahan, Dayton, Ohio.

September 27th, Jersey Cattle, George C. White, Storrs, Conn.; Ayreshires, John Cochrane, Bernardsville, N. J.; Hampshire Swine, H. H. Havner; Sheep, William Cornwell, State College, Pa.

## New Dairy Equipment Consolidation

A new corporation, to be known as the Cherry-Burrell Corporation has been formed which consolidates a number of the important manufacturers and distributors of dairy equipment supplies?

Included in the new corporation are the Wright-Ziegler Corporation, Boston, Mass.; Cherry-Bassett Co., Philadelphia, Pa.; John W. Ladd, Detroit, Mich.; D. H. Burrell & Co., Little Falls, N. Y.; J. G. Cherry Co., Cedar Rapids, Mich.; A. H. Barker-Goodhue Co., Chicago and the Milwaukee Dairy Supply Mfg. Co., Milwaukee, Wis.; Walter Cherry is president of the new corporation while Loomis Burrell is chairman of the Board of Directors.

## Dairy and Poultry Feeds

That Produce Results  
Farm Supplies of all Kinds

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## Lime-Marl

is your best SOIL SWEETENER. More satisfactory and economical than any other form of lime. Acts quickly, is fully available, has no burning effects. Is fine and dry. Brings best results at least cost per acre.

Low in cost. Write for prices delivered your station.

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(Two Plants on B. & O. Railroad)

## CRUMB'S Chain Hanging STANCHIONS

Also Water Bowls  
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Steel Partitions

I can SAVE MONEY for you. Send for booklet.

**WALLACE B. CRUMB**  
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## High Grade Dairy Cows

in  
HIGHTSTOWN, N. J.  
We handle all kinds of cattle

**Holsteins — Guernseys — Jerseys**  
A Specialty

All cows tuberculin tested and sold subject to a 60 or 90 day retest and fully guaranteed in every respect.

Free delivery any distance.

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No medicine, drugs or dieting. Just a light, small, comfortable inexpensive Radio-Active Pad, worn on the back by day and over the stomach at night. Sold on free trial. You can be sure it is helping you before you buy it. Over 150,000 sold on this plan. Thousands have written us that it healed them of Neuritis, Rheumatism, High Blood Pressure, Constipation, Nervous Prostration, Heart, Lungs, Liver, Kidney and Bladder troubles, etc. No matter what you have tried, or what your trouble may be, try Deussen's Radio-Active Solar Pad at our risk. Write today for FREE Trial offer and descriptive literature. Radium Appare Co., 119 Bradbury Bldg., Los Angeles, Cal.

## Alfalfa Hay For Sale

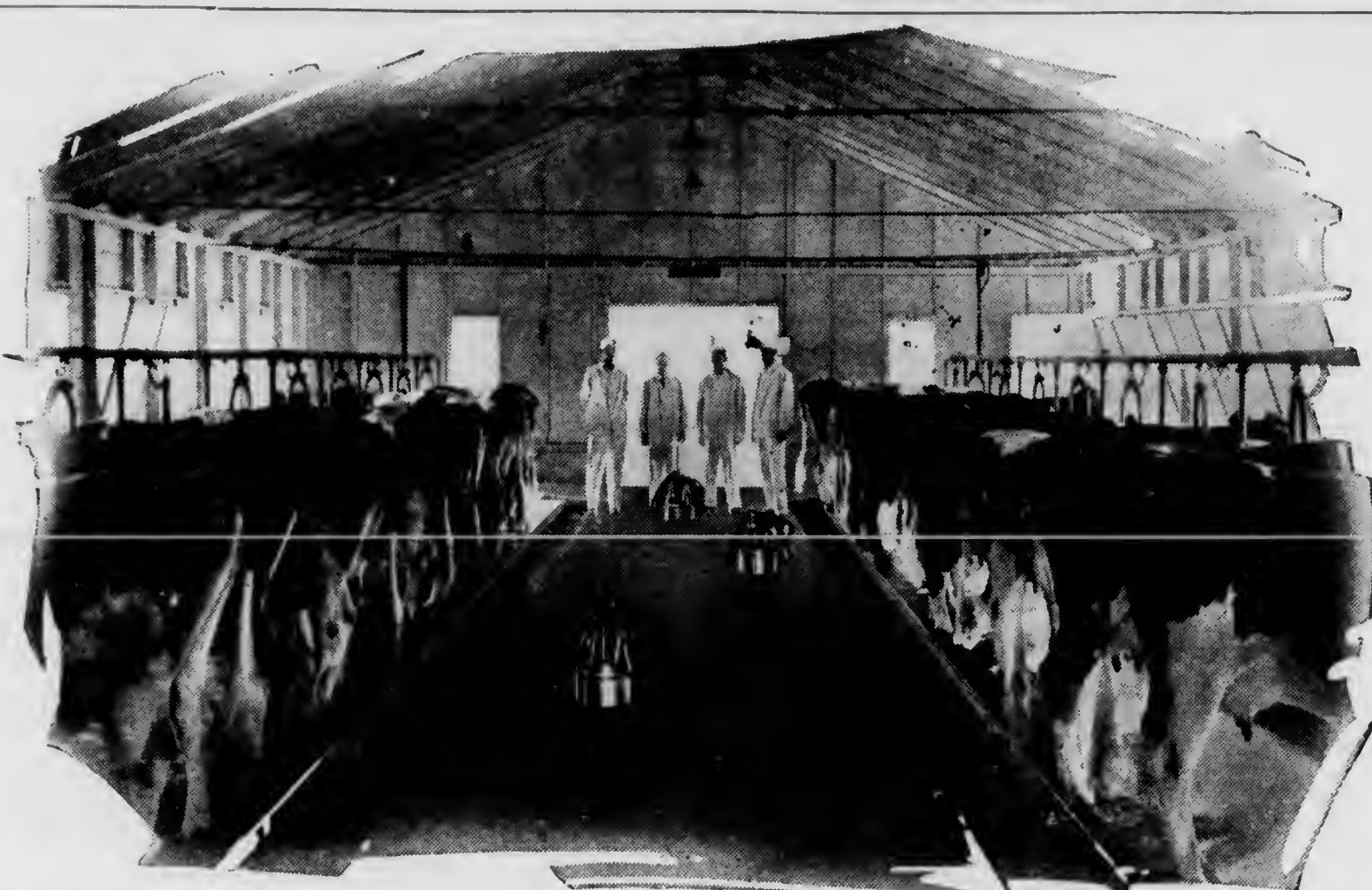
New crop ready for shipment by July 15. Write for delivered prices to

**JOHN DEVLIN HAY CO., Inc.**  
192 N. Clark St., Chicago, Ill.

## Sell Boarder Hens

Loading hens in the farm flock eat up the profits the busy biddies make. Good poultrymen soon send them to the butcher.





A DE LAVAL MILKER IS USED IN THE PRODUCTION OF CERTIFIED MILK AT THE HIGHLAND GUERNSEY DAIRY, OWNED BY MR. ROY C. KINSEY AT ROANOKE, VA. THIS IS ONE OF MANY SIMILAR INSTALLATIONS.

## New Methods of Cleaning and Sterilizing Milkers Now Give De Laval Users Still Greater Satisfaction

THE De Laval Milker was made to milk cows faster, better and more economically than could be done by any other method. Before it was placed upon the market, 24 years were spent in its development—it was right in principle, design and construction before it was ever offered for sale. And because of this, more than one million cows the world over are now being milked in less time and with less labor, and better, than they were ever milked before.

The production of clean milk with the De Laval has always been given important consideration. The De Laval Milker was designed and constructed so that every part was readily accessible and could be washed and kept in a sanitary condition. De Laval users have always been instructed in the best known methods of caring for their milkers—and over 94% of the De Laval users state their milkers are easy to keep in a clean and sanitary condition.

To perfect still better methods of cleaning and sterilizing milkers, De Laval engineers have been experimenting for several years, and as a result of this research important contributions have been made to the science and practice of milker sanitation and two very simple methods have been developed so that clean milk can be produced under any conditions and in the least time. These methods are now available for milker users everywhere.

### The best way to keep a milker clean is—never let it get dirty.

The "dirt" in a milker consists almost wholly of the natural ingredients of milk in a decomposed state. Ordinarily a milker—that is, those parts which the milk touches—does not get "dirty" while it is in use. It gets "dirty" between milkings.

If all traces of the pure, clean milk in the teat-cups, tubes and pail are removed immediately after the milking is finished, there is no opportunity for this milk to turn into filth.

The De Laval methods of cleaning and sterilizing milkers accomplish these results easily and quickly, and when properly carried out will produce milk of any desired quality including market milk of all grades, Grade A Milk, Certified Milk or Special Baby Milk. They can be readily adopted by all milker users. They are completely described in a booklet entitled "De Laval Methods of Cleaning and Sterilizing Milkers," which can be obtained from your nearest De Laval Authorized Dealer, or from the nearest office below.

## The De Laval Separator Company

New York  
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Please send me free of charge booklet "De Laval Methods of Cleaning and Sterilizing Milkers."

Method of milking now used \_\_\_\_\_ (state make of milker)

I milk \_\_\_\_\_ cows.

Quality of milk being produced \_\_\_\_\_

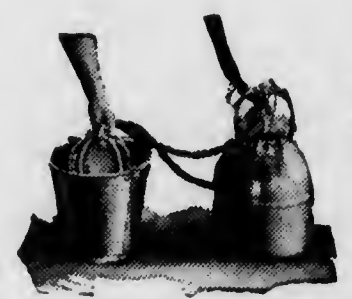
Name \_\_\_\_\_

P. O. \_\_\_\_\_ State \_\_\_\_\_

**SEND COUPON for complete information on the new De Laval methods of cleaning milkers**

### The De Laval Suction Method of Cleaning Milkers

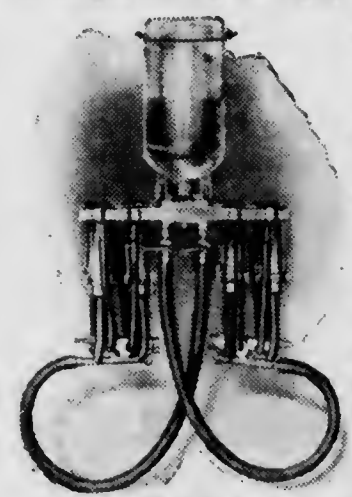
A SIMPLE, practical and quick method of cleaning milkers, by means of which Grade A milk can be produced, now being used successfully on many farms. The milkers do not need to be taken apart except once a week or so, and then only for liner inspection and stretching. This method is based on the principle of starting with a clean milker and never letting it get dirty, as follows:



(1) Cold Water. Twice a day, immediately after each milking, attach the vacuum line and suck cold water through each unit until all the milk is removed. This must be done after every milking, and immediately.

(2) Hot Water. Twice a day, immediately after each milking, suck through each unit at least one gallon of scalding water; the hotter the better, but it must be at least 150° Fahrenheit. The hot water removes all traces of butter-fat from the rubber parts and cleans the milker.

(3) Sterilizing. After the milker is cleaned it can be kept clean until the next milking by means of the De Laval Solution Rack. This device overcomes any objections heretofore encountered in the use of chemical solutions for sterilizing milkers. It fills the teat-cups and tubes full of solution and eliminates the possibility of air pockets. With this device the solution can be used but once so it is always full strength, and since the solution is applied only to the inside of the rubbers very little is required. Sold by Authorized De Laval Dealers.



NO. 0620 DE LAVAL SOLUTION RACK

### Alpha Exhaust Water Heater

Provides convenient and economical means of heating water for washing milkers. Designed for use with Alpha Engines but can be attached to most all engines. It is scientifically designed to absorb all the exhaust gases from the engine for heating purposes without introducing back pressure. It holds 3½ gallons of water. Sold by Authorized De Laval Dealers.

### The De Laval Pressure Method of Cleaning Milkers

This method is particularly well adapted for the producer of certified or special low-count milk of any kind, who has steam and running water available. It is the ideal method for such producers. After milking, the teat-cups are transferred to the racks and supported in a vertical position, as shown in the illustration, while the milk tubes are attached to the lower cocks. Cold water, under full pressure, is forced through the teat-cups until it runs clear. Steam is then turned on, full pressure, thus forcing warm water through the teat-cups, for a few minutes.

Next the water is partly turned off so that scalding hot water is forced through the teat-cups, giving them a thorough boiling out. After the milker is thoroughly cleaned it may be sterilized with steam or the milk tubes may be connected with the solution racks, which are opened permitting the milk tubes and teat-cups to fill with solution, where they remain until the next milking. Sold by Authorized De Laval Dealers.

# Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

Volume IX

West Chester, Pa., and Philadelphia, Pa., September, 1928

No. 5

## The American Institute of Cooperation and My Trip to the Pacific Coast

H. D. ALLEBACH

The general sessions of the Fourth Annual gathering of the American Institute of Cooperation was held this year at the University of California, Berkeley, California and covered the customary wide range of study having to do with the cooperative marketing program in the various fields of agriculture throughout the United States. The entire group of study covered a period running from July 9th to August 4th, although that devoted particularly to the dairy industry covered a two weeks session from July 16 to July 27.

At this session I had been placed upon the program to address and discuss the subject of the "Aims and Methods of Collective Bargaining" in which the general program, principles and methods of the Inter-State Milk Producers

Association were presented and discussed at considerable length. My formal address was printed in full in the August issue of the Milk Producers' Review and needs no repetition in this article.

On Monday morning, July 9th, the Field Trips to the various cooperative packing plants and visits to various farms, members of cooperatives, in that section was resumed. The walnut growing industry was studied on the first day trip. We also visited new "Avocado" Fruit Packing plants, and heard addresses by representatives identified with the cooperative growing and marketing of this product. The Poultry Producers of California showed us their egg packing and feed mixing plant. Here they cleaned and graded the eggs and dipped them in oil before they went to the cold storage warehouses. We also visited the California Walnut Growers Exchange, where officials of the organization explained in detail their operating methods. It is interesting to note that every walnut is stamped and graded before shipment. This days trip took us through the largest walnut growing section of California. A visit was then made to one of the large Lemon Packing Plants. Every lemon is graded and packed in paper. The paper has the advertising matter printed on it, but so far they have not stamped the lemon itself. A visit was then made to the California Fruit Growers Exchange. One of the largest cooperative plants in California. In this plant the oranges were graded and stamped. This plant also manufactures orangeade. It was good, we sampled it. Later we visited one of

## Some Observations in the Big Dairy Regions of Europe

CLYDE L. KING

My trip was planned by the officers of the Inter-State Milk Producers' Association. They directed me to go into each of the leading dairy districts. I also got into the homes and the barns of dirt farmers.

I got into France, into middle and North Germany, into Denmark, England, Scotland and the Channel Isles. I saw the native homes of The Holsteins, The Danish Reds, The Ayrshires, The Herefords, The Dairy Short Horns, The Jerseys and The Guernseys.

These countries all lie to the north of here. Their climate is cooler in summer, but warmer in winter. They are all essentially grass countries. Oats and wheat thrive. Corn does not even make good silage. Oats, field peas and vetch make a good combination for hay.

binnt narrow or drag is then run over the pasture to distribute the manure so as to prevent the strong spots every dairyman is all too familiar with. The pasture is then given a dressing of nitrates. Not a heavy dressing is used, often but about 100 lbs. to the acre.

Each pasture is thus grazed and treated in rotation. The sixth or seventh pasture may not be grazed but kept for hay if pasture No. 1 is ready and the season good.

The essentials are:

1. Rest the pasture.
2. Keep the milk cows on the young grass rich in protein.
3. Fertilize to meet the soil and pasture needs of each dairyman.

I talked with many dairymen, large and small, about this plan. Those who



A view in the "Big Valley District," of Mifflin County, Penna. A typical dairying section.

Concentrates must be purchased. Hay and grass are their first consideration. The Germans and the English particularly are making great strides in pasture cultivation. I think we might learn a great deal from their methods. They do not have blue grass. They select grasses suited to their climate and soil.

### New Methods in Pasture Cultivation

Their new methods in pasture cultivation center in two practices: Resting the pasture, and wider use of commercial fertilization.

First their grazing lands are fenced off into small areas. The usual practice is to have from five to seven pastures in the total amount needed for grazing. The pastures are small enough so that the cows will eat the grass down well in about a week.

The first step is to analyze the pasture soil. If sour it is limed as needed. If other special soil ingredients are wanting, these are supplied. With ordinary soil, the pasture is given a good dressing of general fertilizer in early spring.

When the grass is ready for grazing in the spring, all the cows are turned out onto pasture No. 1. When the grass on this pasture is fairly eaten down, the milk cows are put onto Pasture No. 2, and the dry cows are left to clean up Pasture No. 1. When the milk cows have eaten the "cream" off of Pasture No. 2, they go to No. 3, and the dry cows clean up No. 2.

Pasture No. 1 is then mowed to keep down undesirable weeds and grasses. A

had given the plan a fair trial claimed the following advantages:

1. The milk output from the pastures was just about doubled.
2. No grains were necessary when the cows were on grasses, nourished in this fashion, as the highest protein content is in the young grasses.
3. Pasturing comes at least two weeks earlier in the spring and lasts at least two weeks longer in the autumn.
4. Resting the pastures paid for the fencing and rotation regardless of fertilization.
5. Savings in feed and the increased output in milk paid with profits for all the labor and fertilizer costs.

To be sure there were difficulties. Sometimes the cows had to get used to the grass thus fertilized. Sometimes it was difficult to judge grass needs and hay needs for farmers without barns big enough to store the surplus hay. One farmer told me he feared ammonia sulphate encouraged sterility, but experience generally was strong against this.

Climatic and soil conditions differ. Careful study and experiment is needed before the practice ought to be widely adopted here. But this is by all, the outstanding contribution that European farmers and scientists are now making.

(Continued on page 7)

(Continued on page 2)



## The American Institute of Cooperation and My Trip to the Pacific Coast

H. D. ALLEBACH

(Continued from page 1)

The District Exchanges of the California Fruit Growers, examined the plant and had its operation explained. We also traveled through what is known as the Citrus Fruit Country section of California, to experiment stations of the University of California, which are located in various sections of the state, where among other things they have large orange and lemon groves. California in locating its experiment stations in various sections of the state has made a distinct forward step. Its general headquarters are at Berkeley, but interested producers can study conditions at some one of the numerous stations close to his own home.

We made inspections of orange groves and in one instance an entire row of trees had been set aside for the exclusive use of the visitors, and we enjoyed the fruit too. No second invitation was necessary.

The route then led back toward Los Angeles, through thousands of acres of various kinds of citrus fruit groves and through the lemon producing area. We stopped at the Corona Fruit Growers Exchange, where its methods were explained to us. This last days trip covered an aggregate of 150 miles and covered many of the important production areas of the citrus fruit section.

On Wednesday, July 11th, two tours were available, one to the Los Angeles retail producers markets, the other to a large hatchery and typical dairy farm. Our group took the market trip. This included breakfast at the market house and then visited the Exchange of the California Fruit Growers. At this exchange they bought and sold almost everything in the line of fruit grown in that country, also butter and eggs. We also attended for a brief period, the weekly Board meeting of the California Fruit Growers Exchange. We made a brief visit to Universal City, at Hollywood, where we drove all over the Universal Motion Picture section. It was a highly interesting trip. Later a session was held at the Alexandria Hotel, where addresses were made by representatives of the various cooperatives in that section.

A trip was also made to the Challenge Cooperative Creamery Association, one of the largest butter marketing organizations in the United States. We inspected the plant and some of the officers explained their operation and methods. We also visited a milk distributing plant operated by the California Producers Association and learned the details of its operation and management.

We then visited Fresno, California, where we were met by representatives of the Sun Maid Raisin Growers. We visited a raisin packing plant, saw many grape vineyards in that section, (with the thermometer at 107 degrees in the shade, and no shade), visited the plant of the Danish Creamery Company.

The next day we visited Napa County, California. Napa County is the centre of the Prune Growing Section. We inspected the prune packing plants in that section and also visited one of the largest wine cellars in that district. In this cellar wine was being made for religious purposes only and there was not a preacher in the group. The prune orchards of this section are large and the crop is handled on a co-operative basis.

We then visited Sonoma County where we were met by a group of farmers interested in apple growing. We saw the plant of the Gravenstein Apple Packing Association, one of the largest co-operative apple growing sections, it is said, in the world. We also visited several egg and poultry packing plants in this section and a large hatchery having a capacity of 1,800,000 eggs.

On July 15th, after having arrived at Berkeley, we paid a brief visit to San Francisco and incidentally the weather was almost cold enough to freeze you.

The road of the cooperatives on the Pacific Slope is not all rosy. In the grape and prune industry conditions are extremely unfavorable. In some industries farmers were signed up for a definite term of years. New cooperatives grew up rapidly at the high prices obtained for the product, which has since declined owing to excessive production, and the result is that some of the co-operatives now hold but a meager number of the producers as members. They have lost their control.

In some cases this over production has been due to land speculation. Vast acreages of raisin grapes and prune were developed, planted and sold in 10 and 20 acre farms at top prices. Today many of the banks either own or hold mortgages on these farms and at high prices too. And they can't be moved at the price.

Large cooperatives were built up over night and in many cases the land-owner and even the land itself was tied up co-operatively and could only be transferred, subject to that agreement, which means that the product had to be sold according to the original owners agreement.

These things were all very nice as long as the price was high, but became disastrous, when through outside competition, the price declined.

Conditions of this character, on the whole do not only prevail on the Pacific Coast. I saw the same conditions in the middle western territory. These conditions have roused the interest of the business man of the west who is anxious to have something done for the farmer.

The main difficulty to my mind is definite uncontrolled production.

### The Institute Sessions Open

Following this extended trip through the cooperative fruit growing and poultry sections of California, where the visitors were able to get first hand information of conditions, both in respect to growing and marketing, the formal sessions of the American Institute of Cooperation were begun at the University of California, Berkeley, California, on Monday, July 16th.

There was an attendance of about 200 persons at the various meetings, the major part of those present being from the western section of the country.

The first address was made by Lloyd S. Tenny, Chief of the Bureau of Agricultural Economics, United States Department of Agricultural Economics, who outlined "The Present Situation in Agricultural Cooperation." Mr. Tenny made an outstanding address (since Mr. Tenny's presentation of this address he has resigned as Chief of the Bureau and will be identified with cooperative marketing endeavors in California.)

(Continued on page 6)

## Bi-Monthly Meeting of Directors Inter-State Milk Producers' Association

The regular bi-monthly meeting of the Board of Directors of the Inter-State Milk Producers' Association, was held at its headquarters in the Flint Building, Philadelphia, Pa., on August 15th and 16th, 1928.

Those who attended the meeting included H. D. Allebach, president; Frederick Shangle, vice president; Ralph I. Zollers, assistant secretary; Robert F. Brinton, treasurer; Frank M. Twining, assistant treasurer and the following directors: S. K. Andrews, J. H. Bennet, Ira J. Book, E. H. Donovan, E. Nelson James, J. W. Keith, H. I. Lauer, S. Blaine Lehman, A. R. Marvel, I. V. Otto, E. R. Pennington, J. A. Poorbaugh, C. F. Preston, Albert Sarig, C. C. Tallman, R. I. Tussey, Harry B. Stewart, S. U. Troutman, Frank P. Willits and A. B. Waddington. There was a one hundred per cent attendance of the directors.

The minutes of the previous Directors meeting and those of the Executive Committee, covering meetings held June 5th, June 25th, August 10th and August 15th, were approved.

A report from R. W. Balderston, secretary, who has been attending the sessions of the World's Dairy Congress, London, England, as a delegate from the Dairy Council, was read to the directors by assistant secretary Zollers. This letter presented a brief outline of dairying conditions generally in England, Scotland, Wales and other countries.

Robert F. Brinton, treasurer, presented a report of the financial standing of the association for the months of June and July, 1928, which report was approved and ordered filed.

President Allebach presented to the Board the approved program for the Philadelphia Selling Plan for 1929. Except for one or two minor details this plan was the same as that formally adopted at the last meeting of the Board of Directors. Mr. Allebach then made a brief report of his recent trip to attend the American Institute of Cooperation, held at Berkeley, California. (A brief account of this trip is printed elsewhere in this issue of the Milk Producers' Review.)

A new field representative on the force of the Field and Test Department, Mr. J. Thornton Plummer, was presented to the Directors by F. M. Twining, while C. I. Cohee of the Quality Control Department of the Dairy Council, presented Ralph R. Peters, Clarence Drumgold and Harry Cottman, new members of that department.

Following detailed reports of market conditions by the various directors, the meeting was recessed until Thursday Morning at 9.30 o'clock A. M.

### Thursday's Session

After further reports had been made by the Directors, Dr. Clyde L. King, who represented the Inter-State Milk Producers Association at the World's Dairy Congress, held during the month of July, in London, England, made an informal report of his trip, including visits to Denmark. (A brief article of dairy conditions abroad as reported by Dr. King, is printed elsewhere in this issue of the Milk Producers' Review.)

Frederick Shangle, vice-president, made a report of the trend of market conditions during July. He also presented a general report on business and office conditions during the temporary absence of Mr. Allebach.

A report of general conditions in the Field and Test Department was made by F. M. Twining, while C. I. Cohee, Director of the Quality Control Department of the Dairy Council reported on field conditions in connection with inspections on the Sanitary Regulations and general campaigns for better and more profitable milk production.

President Allebach presented an outline of general market conditions together with an outlook as to the probable future trend of the market.

National protective tariff rates, particularly in connection with those pertaining to dairy products and their relation to other tariff rates was discussed by Frank P. Willits, following which a resolution was adopted endorsing the movement that the tariff rates on farm and dairy products should be increased and placed on a line comparable with that now in force on manufactured and other commodities.

Reports from the field by the various directors include a slight falling off in milk production during the month. Pasture conditions range from exceptionally good to fair. Hay crops have been good. The wheat yield shows a wide diversion from extremely good to a complete failure. Rain fall has also been irregular, some sections have had too much rain while in others there has been a drought. Corn crops have been generally good. In some sections however, rains with high wind have seriously damaged the crop.

H. W. Leetone, of Huntington Co., Pa., a member of the association, attended the meeting and at the close of the session made a short address.

## Bull at Large Proves Expensive to Owner

On Monday, July 16th, the New Jersey law which was passed in 1925, which was to afford protection to dairymen from dangers done by roving bulls, was given its first test in the Mount Holly, N. J. courts.

The case consisted of a suit by Charles Wolf, of Burlington, N. J., who owns a pure bred herd of registered Ayrshire cattle against a Mr. Brazelli, his neighbor, who was allowed two of his scrub bulls to rove at large. On two or three different occasions these bulls had trespassed and done damage to Mr. Wolf's herd with the result that Mr. Wolf decided to give the law a chance to operate.

The case was tried and the Jury returned a verdict of damages in favor of Mr. Wolf for \$400.

This should be a signal warning to owners of bulls that the law passed in 1925 is effective, and if they allow their bulls to get out of their control and off their premises that they may expect to pay a fine and damages resulting therefrom.

The law specifically states that there is a \$100 fine for the bull running at large, regardless of whether damage is done or not. (C. T. in a recent issue of the "Pennsylvania Farmer.")

NOTE—It is understood that the statutes of the State of Pennsylvania carry a law of a similar nature for such offenses.

The only real basis for measuring success in the production of farm products, be they parsnips or pigs, is by the net return.

## Dairying in Germany By R. W. Balderston

Dairying in Germany, is, in some respects, remarkable and in every way interesting to an American visitor.

First of all is a wide spread appreciation in Germany of the importance of milk in human diet and also the economic advantage to a nation of a relatively important and efficient dairy industry. The National Government is pushing milk consumption propaganda through its National Milk Committee and also calling the public's attention to the importance of successful dairying in a permanently successful national agricultural and nutritional policy.



Combined Farm Building and House in Westphalia

Everywhere there is noticeable a new interest in dairying as a major industry. No longer is it left to untrained peasant minds to improve the quality of dairy cattle and to institute improved methods of feeding dairy cattle and handling milk on the farm. We are told that in the proportion of cows in Cow Testing Associations, Germany now is second only to Denmark. The native breeds of dairy cattle are being rapidly improved by selection and the use of improved sires. Modern feeding methods as practiced in Denmark and Holland are being rapidly applied.

The distribution of fluid milk and the manufacture of dairy products are no longer generally in the hands of the



Holstein Friesians at Pasture in Schleswig-Holstein

small milk handler and the farm butter and cheese maker. Modern milk plants on a city wide scale have been recently built in cities like Plauen, Mannheim and Kiel and similar installations are being planned and erected in other centers.

During the past five years, two institutions for dairy research and education, have been started, one at the University of Kiel in Schleswig-Holstein at the north, and the other at Weihenstephan near Munich in Bavaria at the south. Both are financially supported by the central government, but both have local connections, being located in the two most important dairy sections of the nation. Both have commercial plants for the manufacture of dairy products, such as butter and cheese. At Kiel is a modern fluid milk distribution system, and at Weihenstephan an up-to-date certified milk dairy.

Graduates of these schools take positions in the industry and the "Experiment Station Reports" of the Institutions cover every problem of modern dairy practice. The Institute at Kiel has

seven departments—Dairy Engineering, Dairy Chemistry, Dairy Bacteriology, Dairy Physics, Dairy Husbandry, Dairy



Milk Distributing Bar in Neuremberg Park Economics and Veterinary Science. At Weihenstephan there is a smaller group of activities, as the institution is still quite new. Dr. Lichtenberger of Kiel and Dr. Demeter of Weihenstephan have made extended visits to the United States and are thoroughly familiar with American dairy progress.

This summer the banking interests of Germany have financed the visit to Germany of a Commission of American experts to make a study of the dairy industry in its relation to agriculture and to the public welfare. This commission under the guidance of Dr. Rahn of Cornell, formerly of Kiel, is to report



Country Receiving Station Supplying Milk to Munich

its findings when prepared to aid future dairy progress in Germany. In the lowlands of Schleswig-Holstein at the north between the north and Baltic seas and in the mountain regions of southern Bavaria summer pasturing has long been the usual practice among dairy farmers. In some of the grain-growing sections of the land, however it has been the custom to stall-feed the cows throughout the year. Hauling to the barn green grass sufficient for large herds of cattle is now becoming very expensive, due to rising labor costs and many are questioning if the practice is now an economically sound one. I saw successful dairymen in the grain growing districts who had set aside permanent pastures which under carefully manuring, carry large numbers of cattle throughout the summer. A supply of green clover is generally available to bridge over dry periods in mid-summer.

As one looks back on a tour of Germany from north to south in company with local dairy leaders who acted as guides and hosts, the impression remains that there were almost no hay fields except those seeded to red clover or alfalfa. One can see every stage of agricultural progress in Germany. Often side by side in neighboring fields will be a motor plow of the large farmer and the one-ox plow of the small farmer. We saw much grain cut by man-power with crude cradles. Still more was being harvested by the old fashioned reaper and bound by men or more often women. And in every section were modern binders of well known American makes.

## Sanitation on the Farm By N. S. Grubbs

Sanitation is defined as a word that may cover a wide range of conditions. Its application to farming, however, refers principally to cleanliness and the methods employed in keeping things clean—although the same definition may be applied to its use in many other fields. If all farm buildings admitted unobstructed sunlight and fresh air, there would, probably, be no infectious diseases in live stock from that source. Many of these diseases are due, to a large degree, to the lack of sunlight and fresh air, which might be considered natural purifiers.

It is advisable therefore, to provide for as much window space in barn buildings as possible, even at the expense of overdoing the ventilation. The interior of the window frame as well as the exterior should slope downward. The outside to permit of the rain draining off and the inside to permit of a maximum entrance for sunlight. This will permit of a maximum use of sun and light rays to the gutters and floors. The number of posts, columns, beams and other structural portions of the building should be as few in number as is consistent with good building construction. All shelves, racks and other unnecessary projections should be eliminated. They are at the most dust and dirt collectors.

Corners of stable gutters, which may harbor bacteria should be round and so constructed that they can be cleaned and well drained. Clean, well draining mangers which are thoroughly dried out after feeding add greatly to the sanitary condition of the stable. Floors and mangers should be frequently

cleaned with a strong lye solution and be kept free from unsanitary odors. Manure should be removed from the barn at least once a day.

The same principles of fresh air and sunlight apply to the dwelling house as they do to the farm buildings. The outstanding requisite for sanitation in the home is an adequate supply of water, and I should strongly urge running water. Pure water liberally used goes a long way toward making things clean—and keeping them clean as well. House flies must be controlled. They are one of the most dangerous bacteria carriers. There are several effective ways of controlling the fly.

Not only is the fly a dangerous nuisance, but it also is a hindrance to the working ability of animals and particularly the milk flow of cows. It is possible to eliminate a very large percentage of the ordinary flies by means of traps. The effective use of screens is also a satisfactory method of keeping flies out of barns and dwellings.

Sanitary disposal of sewage is an important factor. The septic tank is a very satisfactory method for use on the farm. It is effective and permanent.

Waste materials of all kinds should be properly cared for. This applies not only to waste food stuffs but to rubbish of all kinds. The latter can be destroyed, to a large extent by burning.

There is no question but that a little attention paid to sanitation and to sanitary methods on the farm will result in more healthful conditions, not alone to your family, but to your live stock as well. An ounce of prevention is worth a pound of cure—and in most cases—a great deal more.

## Sweet Clover Requires Lime Inoculation and Firm Seed Bed

Sweet clover will grow almost anywhere, providing there are more than 17 inches of rain and sufficient lime in the soil. However, in spite of the fact that sweet clover is a hardy plant, it is not always easy to get a stand.

In a new publication just issued by the United States Department of Agriculture as Leaflet 23-L, "Sweet Clover," some of the essentials of sweet clover culture and utilization are discussed by Dr. A. J. Pieters, agronomist of the Bureau of Plant Industry. A copy of the leaflet may be secured upon request.

Three things are especially important in securing a stand of sweet clover, according to Doctor Pieters. They are lime, inoculation, and a firm seed bed. It may not always be necessary to neutralize an acid soil, but sweet clover commonly must have lime if it is to do well. Inoculation of the seed or soil is advisable where the crop is to be grown on land that has grown neither alfalfa nor sweet clover before. A firm seed bed is necessary. Many failures have been shown to be due to lack of rolling or compacting the soil after plowing.

Sweet clover may be utilized as hay, pasture, and for soil improvement purposes. As a hay crop, however, it is not equal to alfalfa or red clover. As a pasture, a good stand of sweet clover in its second season will furnish more grazing than any other plant known. It is also an excellent crop for soil im-

provement, and fortunately it will serve both as a pasture and a soil improving crop at the same time. In some sections it has been found that the increased yields of sugar beets due to sweet clover were practically the same when the crop was turned under after being pastured as when the entire crop was turned under.

The value of sweet clover as a soil improver lies in its ability to take nitrogen from the air through the nodules on the roots, to store this in its thick roots and in the stems and leaves, and to deliver it by rapid decay when it is turned under. Much if not most of the nitrogen in the top growth of the first season moves into the roots in the fall and is stored there. The new growth in the spring is made from this stored nitrogen, and in April and early May, as the nitrogen in the tops increases, that in the roots decreases. This feature and the fact that it starts growth very early make sweet clover an ideal green manure for corn. It is not necessary to wait for a large spring growth before turning under; usually there will be no more nitrogen May 15 than there was April 15, and the field can be plowed just as soon as plowing can be done after a few inches of growth have been made to insure that the tops will die and not come up in the corn.

A copy of the leaflet may be obtained by writing to the United States Department of Agriculture, Washington, D. C.



## INTER-STATE MILK PRODUCERS' REVIEW

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Approximately seventy percent of all the milk handled in the Philadelphia Milk Shed comes from members of the Inter-State Milk Producers' Association. Milk coming to the different large buyers in the Philadelphia City area, aggregate about 66 2-3 per cent of members' milk. The smaller dealers, in both Philadelphia and the surrounding towns, such as Reading, Pa., Wilmington, Del., and Trenton, N. J., receive a larger proportion of their purchases from members.

Probably ninety per cent of all the farmers shipping milk under the Philadelphia Selling Plan receive full association prices. Ten per cent probably ship to non-cooperating dealers and are paid on price schedules not quite in line with association prices, but aggregate that amount on a year round basis.

In addition to having the benefits of association prices, members receive valuable other services. The check testing service for the butter fat content of farmers' milk goes only to its members. The many minor troubles of the member shipper are cared for by the organization. Correction of error in payment of buyers and many various adjustment factors are also taken care of by the association.

While the non-members must conform to the sanitary regulations under the direction of the Quality Control Department of the Philadelphia Inter-State Dairy Council and while he may obtain the association price for his milk, there are many other features of the organization work which he does not receive and which may be obtained by the small price paid by him in membership dues.

Every shipper of milk in the Philadelphia Shed should enjoy the full services of the Inter-State Milk Producers' Association. During the month of July 46,831,103 pounds of fluid milk, valued at \$1,653,305.05 were shipped to co-operating dealers in the Philadelphia Market alone.

The Twelfth Annual Meeting of the membership of the Inter-State Milk Producers' Association, will be held, this year, on November 22nd and 23rd. The sessions will be held in the Benjamin Franklin Hotel in Philadelphia.

It is not to early to plan for your attendance at this session.

Every Local of the Association should be represented by official delegates. When ever possible, individual members of the association, in addition to the official delegates of Locals, should attend these meetings and participate in the business of the organization.

At an early date blank Proxy forms will be sent to the officers of the various Locals. If you cannot attend the annual meeting of your association, see to it that you give your delegates your formal Proxy, so that he can vote and act for you.

While the official program has not yet been definitely determined, the meeting will, no doubt, be of exceptional interest to the entire membership. Do your part by attending the various sessions and taking part in the general business affairs and deliberations of your organization.

Secretary R. W. Balderston, has recently returned from an extended trip to England and Continental Europe. Mr. Balderston attended the sessions of the World's Dairy Congress, held in London, England and also visited the important dairying sections in Western Europe. From time to time Mr. Balderston will prepare articles which will be printed in the Milk Producers' Review, giving his impression of dairying in the various countries he visited.

### Nils A. Olsen New Chief U. S. Bureau of Agricultural Economics

Announcement has been made of the appointment of Nils A. Olsen, as chief of the Bureau of Agricultural Economics, to succeed Lloyd S. Temy, recently resigned.

Mr. Olsen joined the U. S. Department of Agriculture as an assistant agricultural economist in 1919, and has been progressively promoted since then through the various economic activities of the department. As assistant chief of the bureau he has been responsible for the development and coordination of research work in the Bureau.

Mr. Olsen was graduated from Luther College, Iowa, in 1907; was a graduate student in history and economics at Johns Hopkins University in 1907-08; received a master's degree in history and economics at the University of Wisconsin in 1909; was an instructor in history and economics at Muhlenberg College, Pennsylvania, 1909-10; an instructor and graduate student in history and economics at Harvard University 1910-12, and a farm manager from 1912-19. He was born at Herscher, Illinois, August 31, 1886.

### Clifford E. Snyder New President, New Jersey State Board of Agriculture

Clifford E. Snyder has been elected president of the New Jersey State Board of Agriculture, succeeding Hon. Joseph S. Frelinghuysen who retired on July 1st, 1928. Mr. Snyder was previously vice president and the Board elected Elmer H. Wene to succeed him as vice president.

### Milk Cooperative Begins Operating

The St. Louis Milk Producers' Co-operative Association, East St. Louis, Ill., began operating June 1, 1928. On that date members of the association began delivering milk to a distributing agency on a contract which provides that 2 cents per hundred pounds of milk be remitted by the distributors to the association. Eighty milk producers are included in the present marketing arrangement.

## Market Conditions

H. D. ALLEBACH

We are again approaching the season of the year when production will figure in the milk producers basic amount for 1929. While production, on the whole has decreased somewhat during July and August, it has not fallen much lower than was the case in those same months last year. From April to June 1928 there was an increase in production each month, but with the continued hot weather and the prevalence of flies production dropped off. An increasing amount of sour milk during the hot spell also had some bearing on the aggregate volume of the milk marketed.

With the extremely hot weather that has prevailed in the Philadelphia Milk Shed consumption of dairy products has increased, particularly in the case of ice cream. Under these circumstances the market has been in relatively good condition.

The 1929 Selling Plan, as has been announced several times in the Milk Producers' Review, will use a basic based upon a three year average production. At present the supply of basic milk about equals the demand. We believe that no producer should fall below his present basic average during October, November and December, but should maintain it at the same basis.

We are not encouraging dairymen to increase this production during these three months. If this were done we would, no doubt, find our selves with a surplus basic, which condition might have an unfavorable influence on the market. The maintenance of the present basic supply appears to represent just about the general demand.

From a careful survey of the market today it is apparent that conditions at the time are relatively satisfactory.

Our statistical records show that during July, the Inter-State Milk Producers' Association handled 46,831,103 pounds of milk. The average weighted price of 4 per cent milk f.o.b. Philadelphia for July was 3.530 cents per hundred pounds.

#### August Milk Prices

Grade B market milk, three per cent butter fat content (basic quantity average), delivered f. o. b. Philadelphia, during August is quoted at \$3.29 per hundred pounds.

The price of basic milk (basic quantity average) three per cent butterfat content, delivered at Receiving Stations in the 51-60 mile zone, during August, is quoted at \$2.71 per hundred pounds. The usual butterfat differentials and freight rate variations applying at other mileage points in the territory, are shown by quotations on page 5, of this issue of the Milk Producers' Review.

The price of Class I surplus milk, for August, three per cent butterfat content, at all Receiving Stations, is \$1.80 per hundred pounds. For f. o. b. Philadelphia delivery the price for Class I surplus milk is quoted at \$2.38 per hundred pounds or 5.1 cents per quart.

Under the Philadelphia Selling Plan, Class II milk is eliminated during the last half of the year. All milk will, until further notice, be sold under the classifications of basic and Class I surplus.

#### August Butter Market

With but one or two changes in prices the trend of butter prices has been definitely upward. Throughout the month the market has ranged from steady to strong. There has been a fairly active demand, mostly for consumptive purposes. At the close of the month the tendency appeared to be rather that of making current sales at small profits rather than holding for definite higher prices.

United States storage reports indicate greater storage. These reports issued on August 15th, show holdings on August 1st in the entire United States to be 120,327,000 pounds. One year ago these holdings aggregated 145,147,000 pounds, a comparative shortage of 24,820,000 pounds. In the trade the increase this year was not as great as was anticipated.

Price of 92 score butter, solid packed, New York City, opened the month at 45 1/2 cents. There was a slow fractional upward movement which closed at 48 1/2 cents.

The average price of 92 score butter, solid packed, New York City, on which the August surplus price was computed, was .4656 cents a pound, as compared to .4481 cents in July and .4161 cents a pound one year ago.

### Report of the Quality Control Department Philadelphia Inter-State Dairy Council.

The following is a report of the work done by the Quality Control Department of the Dairy Council, for the month of July, 1928.

No. Inspections Made... 2762  
No. Plants Inspected.... 9  
Sediments Tests ..... 374  
No. Permanent Permits  
Issued ..... 339  
No. Temporary Permits  
Issued ..... 137  
No. Meetings Held .... 3  
Attendance ..... 370  
No. Miles Traveled ... 22,130  
During the month 42 dairies were discontinued from selling for failure to comply with the regulations—10 dairies were reinstated before the month was up.

To date 109,622 farm inspections have been made.

### Report of the Field and Test Department Inter-State Milk Producers' Association.

The following statistics show the aggregate operations of all the Inter-State Milk Producers' Association field men in connection with testing, weighing and general membership work, for the month of July, 1928.

No. Tests Made ..... 8054  
No. Plants Investigated.. 43  
No. Membership Calls... 206  
No. New Members  
Signed ..... 51  
No. Cows Signed ..... 317  
No. Transfers Made .... 51  
No. Meetings Attended.. 2  
No. Attending Meetings.. 123

The old farm with old methods was once good enough, but today the same farm must combine with new methods to meet competition. This means up-to-date farm equipment.

## LATEST MARKET PRICES

### PHILADELPHIA SELLING PLAN

The basic price quoted below for August, 1928, is to be paid by cooperating dealers on the average basic quantity established by each producer. For all milk bought in excess of the basic amount, the surplus prices, quoted below for the month of August are to be paid. Under the Philadelphia Selling Plan, all milk in excess of the established Basic Quantity, will, until further advised, be paid for by cooperating dealers at the Class I Surplus Price, that is on the basis of the average price of 92 score solid packed butter, New York City, plus 20 per cent.

The following quotations are based on 3 per cent butterfat content milk and a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down, and are for all railroad points. (Inland stations carry differentials subject to local arrangements.)

### INTER-STATE MILK PRODUCERS' ASSOCIATION PRICES

This price list is issued with the understanding that it is net to the producers and that all buyers using it as a basis of payment to producers, shall in addition thereto make the following contributions and payments:

(1) To the Philadelphia Inter-State Dairy Council 2c per 100 pounds (46 1/2 quarts) of all milk purchased from any producer at prices listed herein.

(2) To the Inter-State Milk Producers' Association 5c per 100 pounds (46 1/2 quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2c per 100 pounds (46 1/2 quarts) of all milk bought from other producers at prices listed herein.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed, for improvements and stabilization of markets and for an educational campaign advertising the food value of dairy products.

BASIC PRICE		BASIC PRICE	
August		August	
F. O. B. Philadelphia	Per 100 Lbs.	Grade B Market Milk	Per 100 Lbs.
Test	Per Cent.	Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.	Freight Rates
1	3.29	1 to 10 incl.	2.68
2	3.31	11 to 20 "	2.83
3	3.33	21 to 30 "	3.02
4	3.35	31 to 40 "	3.13
5	3.37	41 to 50 "	3.33
6	3.39	51 to 60 "	3.43
7	3.41	61 to 70 "	3.64
8	3.43	71 to 80 "	3.74
9	3.45	81 to 90 "	3.89
10	3.47	91 to 100 "	3.99
11	3.49	101 to 110 "	4.14
12	3.51	111 to 120 "	4.24
13	3.53	121 to 130 "	4.34
14	3.55	131 to 140 "	4.50
15	3.57	141 to 150 "	4.60
16	3.59	151 to 160 "	4.75
17	3.61	161 to 170 "	4.80
18	3.63	171 to 180 "	4.90
19	3.65	181 to 190 "	5.05
20	3.67	191 to 200 "	5.10
21	3.69	201 to 210 "	5.20
22	3.71	211 to 220 "	5.35
23	3.73	221 to 230 "	5.40
24	3.75	231 to 240 "	5.50
25	3.77	241 to 250 "	5.56
26	3.79	251 to 260 "	5.66
27	3.81	261 to 270 "	5.76
28	3.83	271 to 280 "	5.81
29	3.85	281 to 290 "	5.90
30	3.87	291 to 300 "	6.00
31	3.89		

AUGUST SURPLUS PRICES	
At All Receiving Stations	
Test	Per 100 Lbs.
1	1.80
2	1.82
3	1.84
4	1.86
5	1.88
6	1.90
7	1.92
8	1.94
9	1.96
10	1.98
11	2.00
12	2.02
13	2.04
14	2.06
15	2.08
16	2.10
17	2.12
18	2.14
19	2.16
20	2.18
21	2.20
22	2.22
23	2.24
24	2.26
25	2.28
26	2.30
27	2.32
28	2.34
29	2.36
30	2.38
31	2.40

MONTHLY BASIC PRICES OF GRADE B OR MARKET MILK	
3 per cent butter fat content	
1927	1928
January	1.94
February	1.83
March	1.96
April	1.80
May	1.77
June	1.73
July	1.71
August	1.71

MONTHLY SURPLUS PRICES	
4 1/2% at all Receiving Stations	
1927	1928
January	2.07
February	2.01
March	1.98
April	1.97
May	2.17
June	2.20
July	2.34
August	2.46

MONTHLY SURPLUS PRICES	
4 1/2% at all Receiving Stations	
1927	1928
January	2.07
February	2.01
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April	1.97
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### September Prices Inter-State Milk Producers' Association, Inc.

The price paid for basic milk during September, 1928, will, subject to market conditions, be the same price as quoted for August, 1928. Milk sold to co-operating dealers will be paid for on the basic and surplus plan. The established basic quantity will be paid for at basic prices. Surplus will be paid for by co-operating dealers on the average price of 92 score butter, solid pack, New York City, plus 20 per cent for the month. The second surplus grade has been eliminated until further advised.

AUGUST BUTTER PRICES		
92 Score Solid Packed		
Philadelphia	New York	Chicago
40 1/2	40 1/2	44
40 3/4	40 3/4	44
40 1/2	40 1/2	44
40 3/4	40 3/4	44
40 1/2	40 1/2	44
40 3/4	40 3/4	44
40 1/2	40 1/2	44
40 3/4	40 3/4	44
40 1/2	40 1/2	44
40 3/4	40 3/4	44
40 1/2	40 1/2	44
40 3/4	40 3/4	44
40 1/2	40 1/2	44
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## HIGH COW ON 3 MILKINGS HIGH COW ON 2 MILKINGS HIGH COW FOR BUTTERFAT

### IN SULLIVAN COUNTY C.T.A.



## all AMCO-FED



**BABE**, a seven-year-old grade Holstein, owned by Ralph Rohe of Dushore, Pa., was high cow in the Sullivan County Cow Testing Association last year, with a production in 307 days of 16,782 lbs. Milk and 582.9 lbs. Butter Fat. For three months of the period, she was milked three times a day. Mr. Rohe's net income on Babe,

over all feed cost, was \$176.78. Her exclusive grain ration was the flexible formula AMCO 24% DAIRY. On this same feed, Mr. Rohe's twelve cows returned him an average net profit per cow, over feed cost, of \$156.31 in 1927. Three of the twelve were two-year-olds, and four were three-year-olds.



**CHERRY**, a registered Holstein, 166327, was high cow in the Sullivan County Cow Testing Association on two milkings a day, making 15,217 lbs. Milk and 419.8 lbs. Butter Fat in 330 milking days. She returned her owner, F. V. Rohe of Dushore, Pa., \$183.00 over her feed cost. Her grain ration: AMCO 24% UNIVERSAL

DAIRY, the fixed formula feed. For every dollar charged to feed, Mr. Rohe got back \$1.98 in milk from the eight cows in his herd.



**BESS**, a grade Holstein, 6 years old, was high cow for Butter Fat in the Sullivan County Cow Testing Association. She is owned by Thomas Doyle of Dushore, Pa. In 335 days she made 478 lbs. Butter Fat on two milkings a day. She earned \$200.17 over her total feed cost, with AMCO

24% UNIVERSAL DAIRY as her grain ration.

Your Authorized  
Amco Agent can  
supply you with  
AMCO feeds.

## AMCO

FEED MIXING SERVICE

AMERICAN MILLING COMPANY  
EXECUTIVE OFFICES: PEORIA, ILL.

Plants at: Peoria, Ill.; Omaha, Neb.; Owensboro, Ky.  
Alfalfa Plants at: Powell, Garland, and Worland, Wyo.

DIV. OFFICE:  
MUNCY, PA.

### The American Institute of Cooperation and My Trip to the Pacific Coast

H. D. ALLEBACH

(Continued from page 2)

On this same day addresses were also made by H. E. Erdman, Professor of Agricultural Economics, University of California; Charles R. Fay, professor of Economic History, University of Toronto, Toronto, Canada; E. G. Norse, chief, Agricultural Section, Institute of Economics, Washington, D. C.; W. W. Campbell, president, University of California, Berkeley, California; (to which C. C. Teague, Santa Paula, California, Chairman of the American Institute of Cooperation responded) and an address by J. E. Brownlee, Premier of the Province of Alberta, Alberta, Canada.

At Tuesday's session we had addresses by J. W. Jones, United States Department of Agriculture, Washington, D. C.; R. M. Hagen, of the Western Cattle Marketing Association, San Francisco, California; C. Thorpe, general manager, California Walnut Growers Association; F. A. Stewart, general manager of The Growers Service Division of the Sun Maid Raisin Growers Association, Fresno, California; and M. E. Hays, Director of Field Service, Texas Farm Bureau Cotton Association, Dallas, Texas.

On Tuesday afternoon a conference on Education Programs and Methods was led by Karl D. Schlaman, secretary of the Western Cattle Marketing Association, San Francisco, California.

On July 18th, dealing with Non-members was discussed by John Lawler of the Poultry Association of Central California, while the withdrawal feature of contracts was discussed by Milton D. Sapiro, San Francisco, California. A conference of Sales Methods of Milk Marketing Associations was led by John McGill, Jr., secretary Maryland-Virginia Milk Producers Association, Washington, D. C., while a conference on Cooperative House Organs, was led by R. H. McDrew, Poultry producer of Central California, San Francisco, California. A conference on Scope and Character of Feed Work in Cooperatives was led by Ralph H. Taylor, executive secretary, American Legislative Committee, Sacramento, California.

On Thursday, July 19th, "Aims and Methods of Cooperative Bargaining," were the general trends of discussion. Addresses were made by Frank T. Swett, president and general manager, California Pear Growers' Association, San Francisco, California; M. S. Winder, secretary American Farm Bureau Federation, Chicago, Ill.; H. D. Allebach, president, Inter-State Milk Producers' Association, Philadelphia, Pa.; and Chris L. Christenson, Bureau of Agricultural Economics, U. S. Department of Agriculture, Washington, D. C. A conference on Standardization and Grading, was also held on this day, which was led by F. W. Read, Standardization Department, California Fruit, San Francisco, Cal. Special conferences were also held on Fruits and Vegetables; Dried and Canned Fruit; Nuts and Olives; Dairy Products; Poultry and Eggs and Wool.

Friday's session was used as a Clearing House in Action when topics such as, The Grape Plan at Fresno, California, The Northwest Fresh Prune Clearing House; The Del-Mar-Va., Eastern Shore of Maryland Plan; California Apple Growers' Experiences; The British Columbia Fruit Plan and the Marketing of Florida Fruits and Vegetables; Butter, Eggs and Poultry; Fruit and Vegetable Clearing House Plans as

well as Cattle Sales Methods were discussed.

On Saturday July 21st, Plans of Operation and Organization of California Prune and Apricot Growers was discussed and in the afternoon a trip to San Jose to inspect prune growing and packing was made.

Monday morning's session of the Institute was devoted to discussions of California Cooperative Marketing Problems, while in the afternoon addresses were made on "Contracts or Other Membership Control." At this session addresses were made by Edward J. Tracy, general counsel, Cooperative Pure Milk Association of Cincinnati, and the Miami Valley Cooperative Milk Producers' Association of Dayton, Ohio; "The Legal Status of Membership Contracts," by L. S. Hulbert, U. S. Department of Agriculture, Washington, D. C.

Experience with Surplus Disposal and Control Plants was the subject for presentation and discussion on July 24th, by I. W. Heaps, secretary-treasurer of the Maryland State Dairymen's Association, Baltimore, Md., and by members of the Rice Growers' Association; The California Walnut Growers' Association; and the California Berry Growers' Association. This session was followed by a conference led by C. C. Teague.

A conference of Cooperative Purchasing organizations was held on the same day.

On Wednesday, July 25th, Charles W. Holman, secretary of the National Cooperative Milk Producers' Federation made an interesting address pertaining to the development, operation and program of work carried on by the organization. He outlined its probable future action in national programs effecting the dairy industry and trusted that there would be a full cooperation on the part of agricultural agencies generally in a satisfactory development of the program.

Session of the Institute continued until July 27th, which treated of many interesting problems.

At the conclusion of the dairy program our group planned for their immediate return east. We left California via Salt Lake City, Utah, where a brief stop was made (with the temperature above 100 degrees F.). A short stop was also made in the Yellowstone Park. Our route then led direct to Chicago and from there directly home, where we arrived on Sunday morning, July 29th.

The trip on the whole was a wonderful one. There were many new and varied experiences. I have learned a great deal as to how the other fellow was carrying out his cooperative program, learned of their successes and their failures and I believe, that in our territory and under the conditions with which we operate that the program and development of the Inter-State Milk Producers' Association is built on a sound and enduring policy and that it is one through which the milk producers obtain the greatest good and a fair price for their products.

#### Culling Young Stock

Sell as broilers all pullets that are not developing as well as the average of the flock. These small weak birds are the first to contract disease and never do make profitable producers.

### Some Observations in the Big Dairy Regions of Europe

(Continued from page 1)

For one shall make a start toward the plan in my pasture next spring.

#### Cooperation

Farmers Cooperative Receiving Stations in North Germany have made amazing progress in the manufacture of butter and cheese, especially since the war. There are few independent or privately owned plants. The cooperative plants are tied up with the Agricultural Colleges. The Colleges are setting standards and furnishing cultures. They are going forward on a basis that will make German butter and cheese dominant factors in the markets in England. They promise to be strong competitors of Denmark in this trade. These North German plants rank favorably with the best cheese and butter plants, creameries or factories in any other country.

Eighty per cent of all farm products grown in Denmark are exported. The Danes know their markets thoroughly, even better than do the English in England. Apparently the English farmer is indifferent but the Danish farmer knows and studies every angle of the situation, and he makes his products to suit his market.

The Danish type of living is based on cooperative effort of a sort that is hardly believable. This country as a whole is the only place, I believe, that appears to have something on us. They tie agriculture and cooperation into their schools. Their young people plan to return to the farm. One of their customs is for the young boys and girls, after their school term, to spend at least a year on some neighbor's farm, so as to get further training in actual practical work. The average farm labor wage in Denmark is \$200.00 per year, with board and lodging. Denmark gives you a cooperative religion. Living standards are high and people live frugally but well.

In England wages are around \$10.00 per week, the hired hand boarding and lodging himself. The grade of labor is poor. We would not want much of it. In Germany many thousands of Polish women are imported each season to weed the sugar beets and the cow beets and to do the real hard work. They get about thirty cents a day and feed and clothe themselves. On the larger estates they are put up in great barracks.

In Denmark practically every farm house has electricity. In England there is little electrical service in the country districts. Probably 4 per cent. of the farms are electrified. Ireland is doing a great deal to electrify the country and to get electrification on the farms. The Irish Government is buying receiving stations that do not pay and are closing them so that those remaining can pay cooperative farm organizations. Irish butter and cheese standards are improving. These products are marketed largely in England.

Germany, since the war, is fast coming back and is going to be a big factor in industrial competition with us in the next twenty years. I found the attitude of the Germans toward the United States generally to be friendly, much more so in fact, than that of the English or French farmer. This I think is true of the people generally. The feeding of undernourished children, by the Quakers, particularly right after the war, left a profound impression. It was not expected that enemies would act so.

Outside of the pasture experiments and results I found little that the farmers across the waters have for us save these two things: They plan for a thousand years; we plan for ten. They stick to cooperative efforts.

In Germany one-third of the milk is produced on farms of five acres or less, two-thirds on farms of ten acres or less and most of the milk is produced in herds of about five cows. Herds of 7, 8, 9 or 10 cows are rated as exceptionally big. There is more science applied to milk production in North Germany, but not as yet so extensively as in Denmark.

In North Germany the old "Over Lord" has gone and farmers are now looking for keen young men to operate their farms. They are adopting the new pasturage system. They are forming Cow Testing Associations.

The farms in France and on the islands of Jersey and Guernsey are small and the roads are narrow. The fields are small. They follow the practice of "resting their pastures" by tethering their cows, moving them along about three times a day.

On the island of Jersey I found that the farmers were very well acquainted with the American markets and sales methods for Jersey cattle. Practically all the farmers on the island might be termed professional breeders. They know their breed. There are about eleven thousand Jerseys on the island and about 1000 dairy animals, usually of the highest type, are shipped to America each year.

As for milk distribution I found nowhere, standards or methods or costs that compared with those in America.

Our Grade "A" milk was about equal to their certified. Milk that they sell for ordinary consumption would not have a market here, save on farms "specializing" in tubercular milk. Milk consumption in England is only about 1-3 of a pint per capita. It is a little better in continental countries save in Denmark, Norway and Sweden where it is somewhat higher than with us. Plant conditions in both England and Germany were generally poor. The plants are large but they appear to have no conception as to the value of the economic use of their floor space.

In Liverpool one-third of all the milk consumed is produced within the city limits. This production, in the main, comes from cows that have been bought for fattening purposes to be sold as beef. When these cows get down to a productive basis of about six pounds of milk per day they are killed for beef.

Their methods are about where we were fifteen or twenty years ago.

#### The Dairy Breeds

Space forbids my saying much about the various breeds. The Danes in the past thirty years have worked out a dual purpose cow—the Danish Reds that hold great promise. They are getting good milk production and the breed is improving. The Holsteins on the continent are about like ours but the British Friesians are fat elephants—more like beef cows. I wish all the Hereford and the Ayshire fans might see these breeds on their native pastures; they would recover, but they'd never be the same. Those breeds sure are a sight for sore eyes, and they deliver the goods. The dual purpose shorthorns are making great strides in Central and Southern England, and well deserve renewed consideration, and the Jerseys and the Guernseys thrive on their respective islands as elsewhere. I wish I could say more about them, but the Editor says not.

Outside of the pasture experiments and results I found little that the farmers across the waters have for us save these two things: They plan for a thousand years; we plan for ten. They stick to cooperative efforts.

## Balance your roughage with one of the five UNION GRAINS



THE dairy ration must be balanced to produce maximum results. That means there should be approximately one part digestible protein to six parts digestible carbohydrates contained in both the concentrates and roughage that makes the total ration.

The kind and amount of roughage as well as the kind and amount of the grain concentrates must be considered in working out a balanced ration. If the roughage is timothy hay, which contains but a small amount of protein, the grain fed with it must carry a larger percentage of protein than if the hay were alfalfa instead of timothy.

The Ubiko Milling Company has made it easy for farmers and dairymen to feed a complete, perfectly balanced ration—one which will produce good results under practically all conditions. UNION GRAINS can now be purchased in five different forms—differing in the protein percentages—to supplement the roughage to be fed, or roughage and home-grown grains.

For example, 16% Sweet UNION GRAINS is especially adapted to stimulate a heavy milk flow when cows are on pasture. 20% Sweet UNION GRAINS balances the ration when roughage consists of alfalfa, soy beans, pea vine or clover hay—with or without silage and without home-grown grains. 24% Dry UNION GRAINS and 24% Sweet UNION GRAINS—whichever may be preferred—will provide a complete, balanced ration with mixed hay and

corn stover, with or without silage. 32% Sweet UNION GRAINS should be fed with timothy hay and corn stover, with or without silage, and with some farm-grown corn or oats.

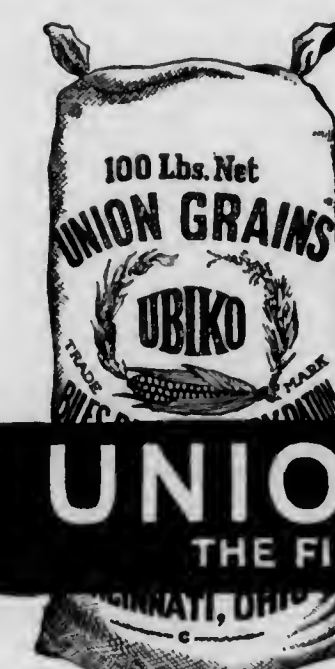
Complete feeding instructions supplied with each type of UNION GRAINS.

Dairymen and farmers may rest assured that each of these five UNION GRAINS is made of exactly the same ingredients. Absolutely no oat hulls, oat feed or mill screenings used. Because of the many different concentrates used in making UNION GRAINS the protein is increased, cows are kept up to a high level of health and regularity of breeding.

Write for information about the five different UNION GRAINS

If you will tell us what you are feeding for roughage, how many cows you have, and whether or not you grow any feed grain, we will outline a feeding program that will more than satisfy you. Also tell us how many free Ubiko Milk Charts you can use. Address

THE UBIKO MILLING COMPANY  
Dept. L-21 Cincinnati, Ohio



## UNION GRAINS

THE FIRST DAIRY FEED MADE

24% Dry. 16%, 20%, 24%, 32% Sweet.

#### Makers of Ubiko World Record Feeds

Ubiko All-Mash System  
Starting and Growing Ration  
Complete Laying Ration  
Ubiko World Record Egg Mash  
Ubiko Fattening Mash  
Ubiko Scratch Feed  
Ubiko Pig and Hog Ration  
Ubiko Horse Feeds  
Union Grains Dairy Rations  
And other Ubiko World Record Feeds

### WHITEWASH WITH WARNER'S

## "LIMOID"

Healthy cows to give pure milk must have clean, fresh, sanitary stables.

Mix water and Warner's Limoid to proper consistency and you have a perfect whitewash which will spread nicely with a brush or can be sprayed without clogging nozzles.

Sold in 10-lb. and 50-lb. paper bags. "Limoid" can be stored indefinitely without deterioration or fire risk. Ask your dealer or write direct.

## Charles Warner Company

ODD FELLOW BLDG.



WILMINGTON, DEL.

farmers across the waters have for us save these two things: They plan for a thousand years; we plan for ten. They stick to cooperative efforts.

In milk consumption, in milk quality, in milk distribution, we can be profoundly thankful for our own standards and progress.





### A Magic Carpet for Gardens

This "magic carpet," which is described in an interesting article in Science, consists of nothing more romantic than asphalt paper more or less like the kind used in making roofs or for insulating the walls of frame houses. The Magic is in the results achieved by the simple process of covering the ground with this commonplace substance.

The method was introduced by the pineapple growers of Hawaii, who greatly increased their yield per acre by planting their pineapples through holes in a specially prepared paper laid on the ground. This not only kept the moisture in the soil, but by keeping in the warmth also provided hothouse conditions for the roots of the plants, so speeding up their rate of growth.

Dr. L. H. Flint, of the United States Department of Agriculture, experimented with this method on the Federal Testing areas at Arlington. His figures showed increased yield, ranging from eleven per cent in green peas and fourteen per cent in lima beans to two hundred and sixty-seven per cent in watermelons and five hundred and sixteen per cent in spinach. In green beans, squashes, cantaloupes, pumpkins, cabbage, carrots, okra and tomatoes, the increase was between thirty and eighty per cent. In cucumbers, lettuce, sweet potatoes, beets, and green corn, the crops were doubled. Potatoes showed a crop increase of three hundred and seventy-seven per cent over the yield from the uncarpeted plot.

This paper carpeting has a three-fold effect: It attracts and retains warmth in the soil, prevents evaporation of soil moisture, and effectively keeps down weeds.—From "Good Health" Magazine

### Around Our House

#### Dustless Dusters

Dustless dusters are designed to collect dust and remove it, rather than to brush it off one piece of furniture only to scatter it in the air or distribute it in other parts of the room. Dustless dusters may be purchased in various shapes, sizes, and materials, or they may be made easily at home. Cheesecloth, velveteen, or cotton flannel are all good materials to use in making them, and a ten-inch square is a good size.

To make such a duster, put one teaspoonful of any good furniture polish, and one tablespoonful each of kerosene and paraffin oil or typewriter oil in a quart fruit jar. Shake the jar until the inside of it is thoroughly coated with the contents and then turn it on a saucer for the surplus liquid to drain. Put the square of cloth in the jar, cover it, and let it stand several days until the fabric has thoroughly absorbed the oily substance that was coated on the inside of the jar. A duster made this way both cleans and polishes. When it has been used until it no longer retains the dust it should be washed, dried and given the same treatment again.

Another type of dustless duster may be made by saturating a cloth with kerosene and hanging it to dry in the open air until it no longer feels wet to the touch.

### Canning For The Farm Product Show

The canned goods at the Farm Products Shows are often so carefully prepared that the final score has to be made on the general appearance of the entry. The placing of the label or color of the glass is not necessary to the keeping qualities of the fruit or vegetable, but does add materially to the neat appearance of the jars as they stand on the shelf. So in preparing the entries for exhibition this fall remember these points:—

1. Use jars or containers of uniform size and make.
2. Use jars of the same color if possible. Jars vary in color from white to blue—white glass gives the fruit a better appearance for exhibition purposes.
3. Use labels of uniform size and style neatly and distinctly marked and placed uniformly on the jars.
4. Pack fruit evenly—large fruits should all be placed one way, either standing up or laid on its side with the bloom side to the outside of the jar.



United States Dairy Council Exhibit—World's Dairy Congress, London, England

The exhibit of the National and regional affiliated Dairy Councils of the United States filled one side of the exhibit room at Westminster Hall where propaganda to increase the consumption of milk was displayed in connection with the meetings of the World's Dairy Congress. The only exhibits at the Congress headquarters were those of publicity character, a large room being set aside for this purpose and overflow exhibits being displayed in hallways and other rooms.

The above illustration fills one-third of the background of the combined exhibit of Dairy Councils of the United States. These panels display material for use in schools. Two other panels of equal size display respectively material for adult use and an exhibit of Quality Control work. Portfolios were placed on each table in front of the exhibits containing all of the material used at present in the United States under Dairy Council auspices.

Similar exhibits were made by England, Germany, Sweden, Denmark, Czechoslovakia, Austria, Hungary and other countries.

The English exhibit was two-fold—one half being that of the National Milk Publicity Council, an organization similar to the Dairy Council movement in the United States; the other part being that of the Empire Marketing Board, an organization which is stimulating the use in the United Kingdom of products of the various units of the British Empire.

Dr. Larson, managing director of the National Dairy Council, was fortunate to secure a large part of the material of foreign countries to bring to America for exhibition at the next annual meeting of the Dairy Council to be held in Chicago in December.

At the World's Dairy Congress, the American exhibit was visited by most of the eighteen hundred delegates representing about forty-five different countries and everywhere the comment was made that the whole world should take additional lessons from America in the matter of propaganda methods for the dairy industry.

### Milk Bars in Germany

One of the interesting sights to the traveller in Germany is the development of lunch bars for the sale of milk and dairy products. Sometimes these are sold in the same establishments as other drinks and light refreshments. In other places they are purely dairy lunches, selling milk, cream, ice cream, butter and cheese. The greatest development of the idea has been in Nuremberg where the city has erected milk stations in which white aproned clerks dispense milk drinks and dairy dishes, under the management of the City Milk Plant. Some salesrooms are in centre of the city, near the markets and are frequented by business men, working men and women. Others are in city parks and playgrounds where the patrons are children and their caretakers. The new project is proving very successful, showing that in the land of beer, many prefer a nourishing and refreshing drink of milk. It is a matter for comment that the majority of the customers are men.

### Increasing Milk Consumption in Germany

#### Some Recent Observations

It was interesting in many ways to revisit Germany this summer after eight years absence. In 1920, as a member of the American Friends Service Committee, working in conjunction with the American Relief Administration, Hon. Herbert Hoover, Chairman, it was my duty to start child-feeding in several parts of Germany among the many badly undernourished children, an aftermath of war-time conditions. American condensed, evaporated and powdered milk furnished a very substantial proportion of the one full meal furnished the children daily. After American funds were exhausted, the German government and city authorities kept up the feeding for several years along similar lines. Then noting the importance of the milk given the children, the distribution of a daily mid-morning portion of fresh milk and a cracker was instituted as a part of the regular school program. This has been managed by local school authorities and financed in part locally and in part by the National government. For instance in Essen, a city of 450,000 inhabitants more than 20,000 children have been regularly receiving this free milk lunch each school day. Dr. Fischer, the Chief of the Department of Health of Essen said to me in explaining the importance of this program, "We consider the health of our children the most important matter before any nation and Germany is determined to be in the forefront in this movement. We find that the consumption of proper amounts of milk will aid most in this program and the educational as well as nutritional value of the milk service in the schools is being fully demonstrated to our satisfaction."

Nutritional authorities in other sections of Germany echoed this statement.

#### Nutrition Exposition Held

A great Exposition on the subject of Nutrition (die Ernährung) has been held this summer in Berlin and visited by many thousands from all over Germany. A very large part of the space in this Exposition has been given to Milk and Dairy Products showing not only how they may best be used in the daily diet, but also their unique nutritional importance.

During the past two years, under the auspices of the National Department of Foods, a National Milk Council or Committee has been organized to do propaganda work along lines similar to those employed by the Dairy Council movement in the United States. In fact the movement in the United States was very carefully studied as to method and emphasis and many of our activities frankly copied or adapted to meet German conditions. The National organization called the Reichmilchausschuss or National Milk Committee functions as does the National Dairy Council with us as the clearing house for distribution of propaganda material and the handling

(Continued on page 9)

### Increasing Milk Consumption in Germany

(Continued from page 8)  
of all National work. One such activity was the holding of a National Institute or school for school teachers where for three days the different phases of the Dairy Industry and its relation to human welfare, were discussed by national authorities. The important regional office in Dresden for example arranges for all propaganda work in the 27 important cities of the state of Saxony.

The methods employed are evidently very effective. Posters and literature are distributed by each council through schools, milk dealers, health authorities, etc. Meetings are held with groups of women and teachers at which the importance of dairy products is stressed. All dairy products are included in the propaganda, but effort is being made just now to secure a greater consumption of fluid milk by factory workers. This movement, new to Germany is meeting with great success. The workers find themselves more efficient and more healthful when they take milk instead of beer for lunch.

The importance of the movement for greater milk consumption in Germany is best appreciated when you realize that the National Government is actively managing the project, and that it has the united support of all branches of the dairy industry, both morally and financially. The leaders of the country are alive to the importance of an adequate supply of fresh milk as a prerequisite to such a program and such a supply is rapidly becoming an accomplished fact in the larger centers. Educational forces and business interests are cooperating in the work and are making it a part of the regular health program. As Americans we can view such a movement with much approbation and study its methods with profit to ourselves.

As American dairymen, we welcome every effort to spread in other countries the gospel of increased consumption of dairy products. If it does nothing more it will relieve the pressure to export foreign products into the United States when our market is favorable. But beyond that selfish consideration, we must realize that with the world on such a program the future of the World Dairy Industry is made permanently secure.

### Philadelphia Inter-State Dairy Council Incorporated

**General Offices**  
Flat Building, Philadelphia  
A cooperative movement established for the dissemination of information and publicity pertaining to the production and distribution of dairy products and their food value in nutrition.

Affiliated with the National Dairy Council

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H. B. Allenbach, Vice President  
R. W. Balderston, Executive Secretary  
R. J. Harbison, Jr., Treasurer

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Lydia M. Broecker, Nutrition Department  
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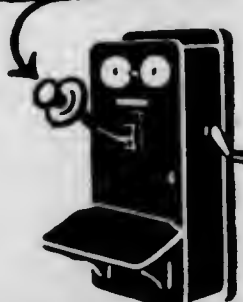


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CALF CHOW BULKY-LAS PIG CHOW HOG CHOW

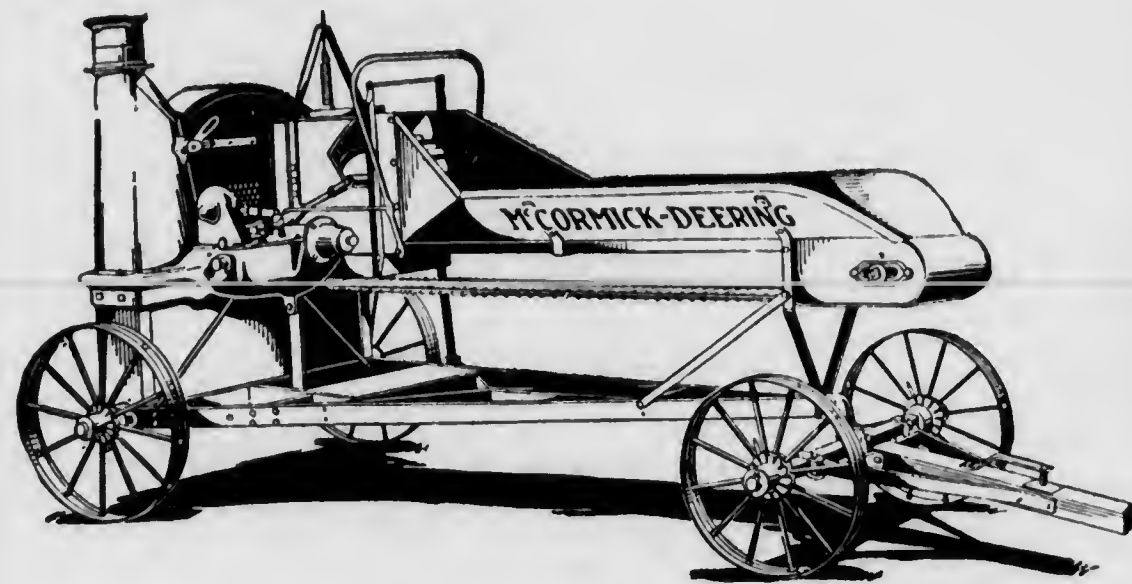
## Philadelphia Inter-State Dairy Council EDUCATIONAL ENTERTAINMENT

The various departments are at your service and will assist you in planning for your Community, Local or Club Meetings. Lectures, Speakers, Motion Pictures, Lantern Slides, Etc. Write us for detailed information and program.

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## Even Distribution

This is a new, tested and thoroughly dependable Spreader built for the widest possible use. The "Non-Wrap" features were invented by a York County farmer and used by him for three years. It positively makes an even distribution of all kinds and conditions of manure. Beaters cannot wrap, therefore even spread in quantities from 4 to 24 loads per acre. Has large bed and exceptionally easy draft.

The All-Steel Frame with channel sides makes a stronger and more rigid bed frame. Both beater shafts are mounted in self-aligning roller bearings. Front axle has great flexibility; cleated and flanged ground wheels, automobile steering and the oscillating tooth bars are distinctive features.

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A. B. FARQUHAR CO., Limited, Box 961, YORK, PA.

Ask about our Rural and Suburban deep and shallow Well Water Systems. Save the good wife many hours of drudgery at very small cost.

### Ventilate for Health

Good ventilation of barns helps to maintain more uniform temperature, keep stock healthier, and eliminate the frost nuisance. Provide it now so good conditions will be available for the coming winter.

### Feed Dry Cows Grain

Now is the time to get cows that will freshen this fall into condition for profitable milk production. Preparation helps fill the milk pail. Extra care and feed both before and after freshening is an investment that will pay good dividends.

### Here and There

About the Territory  
Plans are being made whereby the Extension Service of the State of Maryland and the Inter-State Milk Producers' Association and Dairy Council will co-operate in running a number of Feed Schools in the Eastern Shore of Maryland.

This is part of a program to promote better dairying methods in the Eastern Shore District.

The new \$40,000 Receiving Station being built by the Abbott Dairies Inc., at Easton, Md., is rapidly reaching completion. This plant is located on the railroad and replaces an older one situated some distance from the tracks, at which a hauling charge prevailed. Farmers in Talbot County can look forward to the elimination of the hauling charge.

Plans are being made for a meeting of the Talbot County dairymen to celebrate the opening of this plant.

Farmers in the Shenandoah Valley of Virginia and the Pan Handle district of West Virginia, are reaching out to the Philadelphia market. Trucks of milk are now coming into the Hagerstown, Md., receiving station from these two districts.

Wawa Dairies located in Delaware County, Pa., state that after September 10th, they will only purchase milk from Tuberculin Tested dairies. This will cause no hardships among their producers as they are practically all tested.

Several of their shippers who could not have their herds tested, sold their dairies, replacing them with Tuberculin Tested cows.

Milk Producers in the vicinity of Rising Sun, Md., selling to the Sheffield Farms Company, are busily engaged in concreting the floors of their cow stables.

Milk from this section is shipped to the seashore and other points outside of the Philadelphia district, where certain regulations are required by the local Boards of Health, including concrete floors.

The Dairy Council has been actively cooperating with the Sheffield Farms in forwarding this important work. Several concrete mixers are operated by the Sheffield Farms Company, at no expense to the farmers, for mixing the concrete, and a man is also provided to lay the floors.

Scott-Powell Dairies are rapidly pushing to completion a new receiving station at Snow Hill, Md. Snow Hill is just East of Princess Anne, Md., at which point the Supplee-Wills-Jones Milk Co. is already operating a receiving station.

It is expected that the new plant at Snow Hill will be ready to receive milk by the 15th of September. Plans are being made to bring the milk to Philadelphia by tank truck. This will probably be the greatest distance, at this time, in which the milk will be brought to Philadelphia by tank truck.

The Quality Control Department of the Dairy Council has been bringing pressure to bear on truck haulers in one Eastern County in Pennsylvania, requiring that they carry nine hundred pounds of ice per truck in order to insure the producers of that territory of satisfactory transportation of their milk supply to the Philadelphia market.



## Twenty Sacks Will Do It!

—less than a ton of cement to take home, yet enough to build any of the following:

- 100 rot-proof fence posts.
- Sanitary feeding platform for 24 hogs.
- 120 feet of 24 by 4 in. concrete walk.
- 20-barrel watering tank with platform around it.
- Floor for milkhouse and cooling tank for 20 cans of milk.

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These concrete improvements need be built but once; each is permanent and expense proof.

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Concrete for Permanence

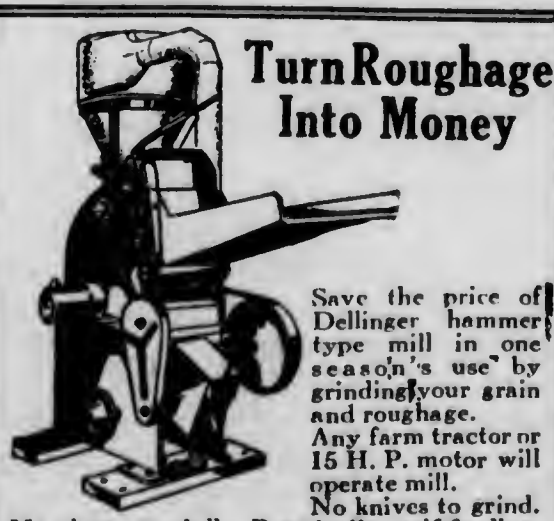


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Write for Catalogue  
A. M. DELLINGER  
727 N. Prince St. Lancaster, Pa.

## The Safeguard of Poultry Health Sterilac

Health is essential to poultry profits. The serious problem of poultry sanitation is best solved through the systematic use of Sterilac—in the drinking water, for rinsing equipment, for disinfecting houses, roosts.

**Increase Poultry Profits**  
Use Sterilac regularly and your poultry will be healthy and productive. Powerful, safe and sure. Convenient powder form, simple and easy to use. \$1 worth makes a barrel of standard solution. Keeps strength. Ask your dealer for Sterilac. If he is not supplied, send \$1 and his name today for large "money-back" trial package.—BOOKLET FREE.

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says: "Cows known to be regular aborters have delivered normal, healthy calves since they were fed."

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ABORTION is the most costly and discouraging disease confronting dairymen. Must abortion be caused or permitted by incorrect feeding. Too much of certain proteins or too little minerals are the most common causes. High-producing cows constantly give off more minerals than can be fed them in ordinary grain feeds. Their body supplies of minerals are seriously depleted and they drop their calves to crisis for Farm Animals. "Minerals are necessary, why OBERCO is the most effective, digestible and economical mineral mixture. Write for Free Booklet 104"

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## CRUMB'S STANCHIONS

Also Water Bowls  
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I can SAVE MONEY for you. Send for booklet.

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## NICE

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## Montgomery County Farmer's Picnic

Upwards of 5000 Montgomery County farmers and their families gathered at Memorial Park, Schwenksville, Montgomery County, Pa., on August 7th and 8th to attend a two day picnic of the farmers in that county. It was the Ninth Annual picnic that has been held by the farmers in that locality.

There was the usual display of farm products, farm machinery, farm appliances, etc., but the outstanding feature of the picnic was the large exhibit of dairy animals, for which there was a keen competition for prizes. Upwards of 50 merchants made exhibits of their various products during the period of the picnic.

### Cattle Exhibits and Judging

Prior to the judging of the cattle a "Cattle Judging Contest" on Holstein cows was held by farmers of the community. The winners in this contest included, Harvey Murphy, Norristown, R. D.; Warren Reed, Lansdale, R. D.; Isaac S. Gross, Plumsteadville and F. M. Twining.

The cattle were judged by J. B. McCool, of the Pennsylvania State College. In the aged Holstein cow class, William H. Landis, East Greenville, won first place. The second ribbon went to H. D. Allebach, Trappe. The third and fourth ribbons went to Mr. Landis while fifth place went to Mr. Allebach.

In the two year old Holstein class, first and second prizes went to Mr. H. D. Allebach, while third place went to Mr. Landis. Mr. Allebach also won first and fourth places in the one year old Holstein Class, with second and third honors going to Mr. Landis.

In the Holstein Calf Class, Mr. Landis won first, second and third ribbons. Fourth and fifth ribbons went to Mr. Allebach.

The champion Holstein of all classes was won by W. H. Landis.

In the Guernsey Classes all the ribbons were taken by Maple Lawn Farms, owned by Isaiah Cassel, of Harleysville.

The general committee in charge of the picnic was headed by H. D. Allebach, Trappe, Pa., chairman. Other members of the committee included, Elmer Ziegler, Limerick; William H. Landis, East Greenville; W. W. Harley, Schwenksville, and R. G. Waltz, county agent for Montgomery County.

### Know What Cows Do

There is no need for a farmer to keep dairy cows without knowing the value of each as a milk producer. Membership in a cow testing association costs less than the feed eaten by a number of "boarder" cows which never pay their board.

### Pastures Need Care

Permanent pastures need manure, lime, and fertilizer to keep them in a highly productive state, say farm crop specialists.

## Progress of Tuberculin Testing

Progress in eradication of bovine tuberculosis is reflected in figures reporting the results of the work for the fiscal year ending June 30, 1928, and the status existing at the opening of the new year, July 1st, as made public by Dr. John R. Mohler, of the United States Department of Agriculture.

Doctor Mohler, who is chief of the Bureau of Animal Industry, announced that during the year ending June 30th, the tuberculin test was administered to a total of 10,826,280 cattle, or more than a million in excess of the largest previous record. In October, 1927, and in March, May and June, 1928, the co-operating State and Federal forces tested more than 1,000,000 cattle in each month.

July 1, 1928, herds numbering 169,356 and containing 2,265,938 cattle, were fully accredited as tuberculosis free, having passed two or more tests. This is an increase of 38,380 accredited herds in one year.

In addition, 15,968,714 cattle in 1961, 113 herds have passed one successful test, and many of these are in modified accredited areas. On July 1, there were 2,290,752 herds containing 21,418,977 cattle under State and Federal supervision for eradication of tuberculosis, or slightly more than one-third of all the cattle in the country. More than 3,000,000 cattle are on the waiting list for testing.

The greater part of the tuberculin testing is now being done under the group or area plan. "Modified accredited areas," in which all cattle have been tested, reactors removed and infection reduced to not more than one-half of one per cent, included 527 counties, parts of two counties, and 21 townships. In 153 other counties all cattle have been tested once, reactors removed, but the infection not yet reduced to the required minimum. Area work is under way in more than 400 additional counties, so that progress has been made in 1,119 counties, or more than one-third of all counties in the United States.

### Co-Op. Membership Climbs

More farmers than ever before are now participating in cooperative marketing and purchasing activities, a recent survey by the United States Department of Agriculture indicates. Some of the farmers are participating as members of particular associations, some as shareholders, some because of contractual obligations to market cooperatively, and some as shippers, consignors, or patrons using the facilities furnished by the various cooperative enterprises.

Including duplications because of farmers belonging to 2, 3, 4, or 5 associations, the estimated membership is 3,000,000, divided among the more important of the commodity groups as follows: Grain-marketing associations, 900,000; associations marketing dairy products, 600,000; livestock marketing associations, 450,000; fruit and vegetable marketing associations, 215,000; and cotton-marketing associations, 140,000.

### Silage a Good Feed

Corn silage is the best and most economical form of succulence for winter feeding. It also provides an economical feed when pastures dry up in late summer. Silage can be handled more easily and economically at this time than soiling crops can.

**Gets ALL the Dirt**

**More MONEY for YOUR MILK**

**10 Day Test**

Write today for descriptive literature and particulars of how Dr. Clark's PURITY Milk Strainers help you get Grade "A" test and more money for your milk.

It is the only Strainer made that's guaranteed to strain 100% clean. Our 10 Day Trial Test gives you to prove it as our risk—your money back if it fails to remove ALL the dirt. Thousands in use—two sizes 10 qt. and 18 qt. Sold by dealers everywhere. (6)

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## Purity MILK STRAINER

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That Produce Results  
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## CHANGE seed Wheat

Try "one of Hoffman's Lancaster County strains. Sow pure, sound, heavy-yielding variety, grown from hand-picked seed. Vigorous, clean, easily produced 5 to 10 bushels more per acre. No smut, rye, cockle, garlic or other weed seeds."

**PRICED RIGHT—costs only 75¢ per acre or less. Let us explain. Ask for free catalog and samples.**

**A. H. HOFFMAN, INC.**  
Box 414 Landisville, Lancaster Co., Pa.

## High Grade Dairy Cows

in HIGHTSTOWN, N. J.  
We handle all kinds of cattle

**Holsteins — Guernseys — Jerseys**  
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All cows tuberculin tested and sold subject to a 60 or 90 day retest and fully guaranteed in every respect.

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**FREE** Write today for "Better Calves" you feed. We'll tell you where to buy skim milk.

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## Alfalfa Hay For Sale

Weights and grades guaranteed. Prompt shipment. Write for delivered prices.

**JOHN DEVLIN HAY CO., Inc.**  
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## Purebred Jersey Herd of Mississippi State Hospital Increases Production with De Laval Milker

The dairy management at the Mississippi State Hospital, Fondren, Miss., attributes a large gain in milk production to the use of the De Laval Milker. For the past two years the herd which is composed of excellent purebred Jerseys has averaged a production of 2 3/4 gallons a day per cow.



The illustration shows the men who handle the milker. The insert shows how every De Laval Milker unit works in unison and with absolute uniformity no matter how many may be in operation. Each cow is therefore milked exactly the same day after day. Every dairyman knows that regular milking in the same manner means greater production. This is an exclusive De Laval feature.

THE Mississippi State Hospital located at Fondren, down in the old Magnolia State, possesses a dairy of which it may well be proud. In round numbers the herd consists of 200 purebred Jerseys, bred and selected for productivity and type.

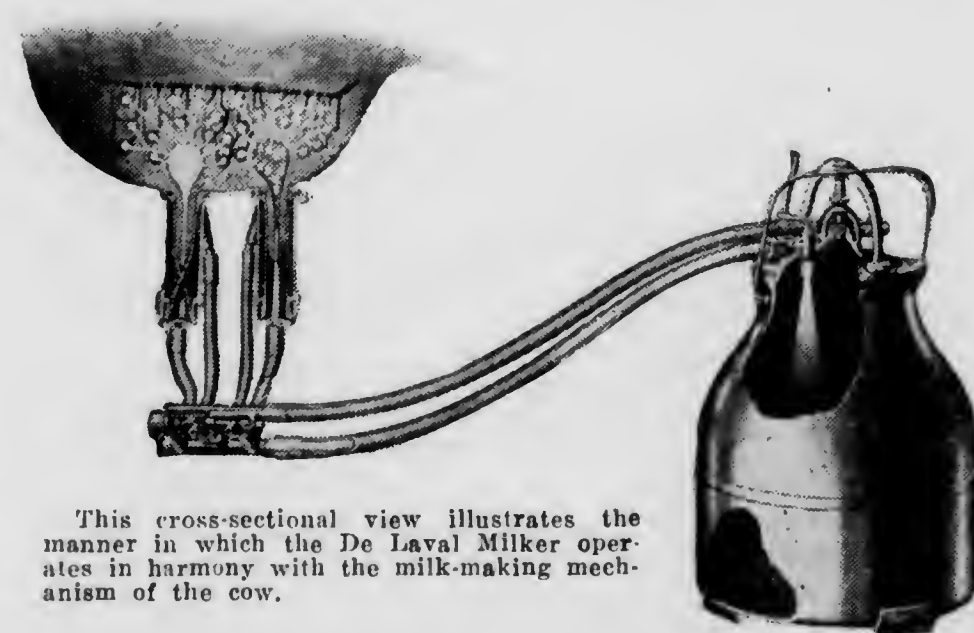
Production and the quality of the product are carefully watched and guarded. Every effort is made to keep both at the highest point and there is abundant evidence of their success along these lines.

Naturally, a De Laval Milker is used at this fine Jersey dairy and the management states, "We know that the use of the De Laval Milker has lowered the cost

of producing a better quality milk and it has been a great help in keeping the production of the cows up to the highest point they are capable of." They state further that since using the De Laval Milker substantial gains in production have been made.

This is but one of the hundreds of leading dairies who have found the De Laval Milker to be an important factor and a great aid in the production of high quality milk, with the greatest possible yield and at the lowest cost.

Write for complete information or ask to have a De Laval representative call at your place. No obligation.



This cross-sectional view illustrates the manner in which the De Laval Milker operates in harmony with the milk-making mechanism of the cow.

The idea that a cow's production of milk can be materially increased or decreased simply through the act of milking is new to a great many people; yet those who are familiar with cows have long known this to be a fact. All practical dairymen know that some people are better milkers than others and can get more milk from the same cows. They know, too, that once a cow becomes accustomed to a certain milker, invariably her production will be decreased, for a short time at least, if milkers are changed. For this reason dairymen insist that the same cows always be milked by the same milkers. That is why the De Laval Milker has proven so popular wherever production is of importance for it was designed and perfected to milk the cow in the best possible manner and to do this uniformly, without variation from milking to milking and from year to year.

## The DeLaval Separator Company

NEW YORK  
165 Broadway

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600 Jackson Blvd.

SAN FRANCISCO  
61 Beale Street

# Milk Producers' Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMERS ASSOCIATION, Inc.

Volume IX

West Chester, Pa.

No. 6

## Inter-State Milk Producers' Ass'n Holds 12th Annual Meeting Next Month

The time is now at hand when every local unit of the Inter-State Milk Producers' Association should hold meetings so as to elect delegates to represent it at the annual meeting of the association and to transact such other business as may come before the Local at that time. The annual meeting of the Inter-State Milk Producers' Association will be held at the Benjamin Franklin Hotel, 9th and Chestnut Streets, Philadelphia, Pa., on Thursday and Friday, November 22nd and 23rd, 1928.

Every one of the 285 locals should have an official delegate at this meeting. The association will pay the transportation charges and hotel expenses for one official delegate from each local having at least 25 members, although as many individual members may attend the meetings if they so desire. Official delegates must be duly accredited by the officers of the local units to insure payment of their expenses.

This meeting marks the twelfth annual gathering of the membership of the association. It is a meeting of the membership at which the members and delegates may participate in the general business of the organization. Plans and policies for the future will be considered and adopted.

Detailed reports will be made by the various officers and the different department heads. Its cooperation with other agencies will be stressed. In fact it is a meeting that as many members as possible should strive to attend.

While it is yet too early for a detailed announcement as to the prominent speakers who address the membership, we can state that Prof. O. E. Reed, Chief of the Bureau of Dairy Industry, United States Department of Agriculture; Dr. C. W. Larson, Managing Director of the National Dairy Council; Clyde L. King, Ph. D., and John A. McSparran and other important authorities in the dairy industry will be among their number.

### Meeting for the Ladies

A specially planned program for the ladies attending the annual meeting is in preparation. The morning session on Thursday, November 22nd will be held in the new offices of the Inter-State Milk Producers' Association, Flint Building, 219 North Broad St., Philadelphia. Luncheon will be served those attending

by the Philadelphia Inter-State Dairy Council.

The committee having charge of the Ladies' Entertainment consists of Mrs. Robert F. Brinton, chairman; Mrs. R. W. Balderston, Mrs. H. D. Allebach, Mrs. Frederick Shangle, Mrs. Frank Twining, Mrs. A. B. Waddington and Mrs. C. I. Coble.

### The Annual Banquet

The annual banquet of the association will be held at the Benjamin Franklin Hotel, Thursday evening, November

## National Cooperative Milk Producers Federation to Hold Annual Meeting in Memphis

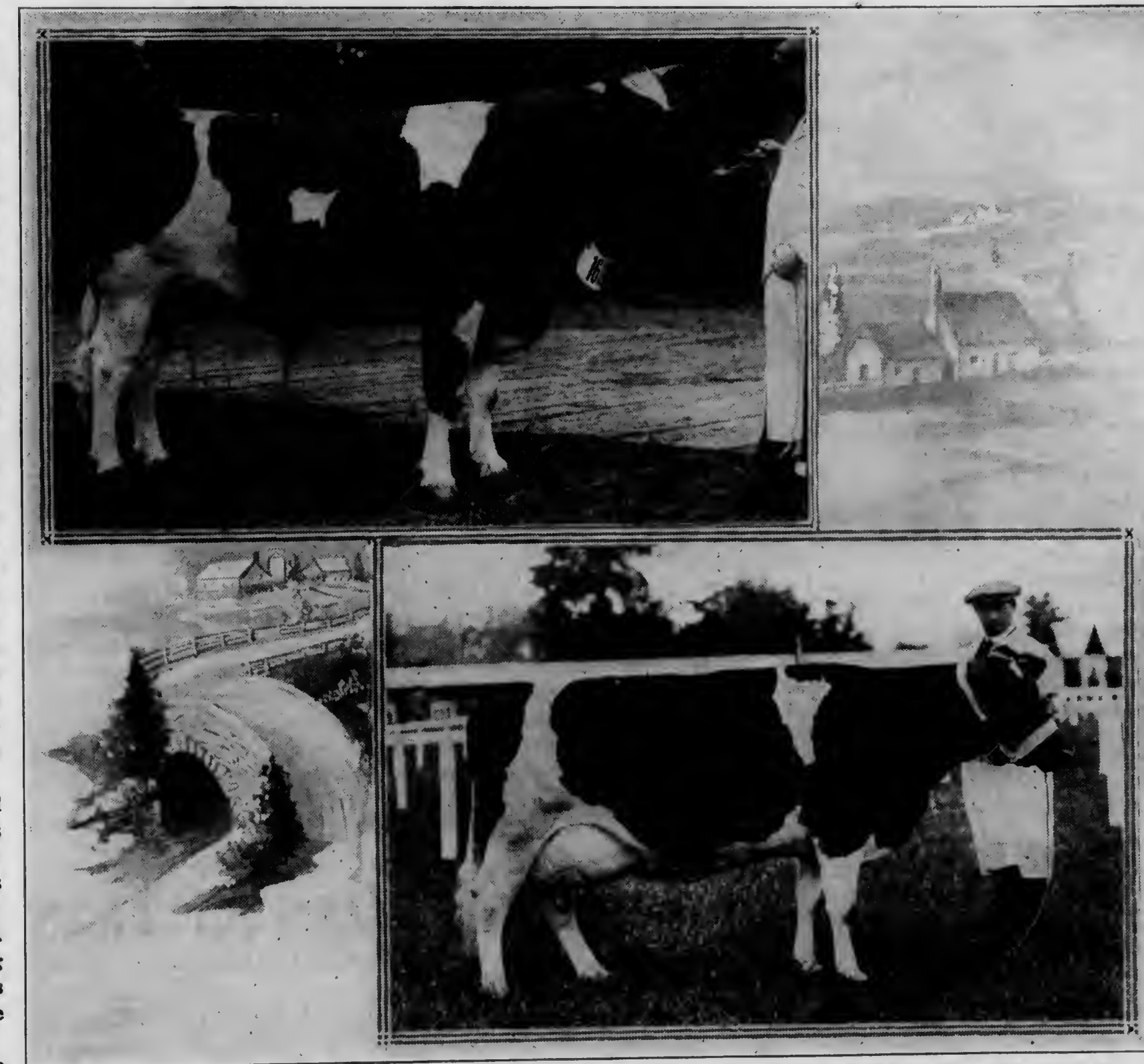
Announcement has been made that the Twelfth annual meeting of the National Milk Producers' Federation, of which the Inter-State Milk Producers' Association is an active member, will be held in Memphis, Tenn., on October 15th to 19th, during the period of the Tri-State Fair, National Dairy Exposition and the National Cotton Show, to be held in that city, October 13th to 20th, 1928. The Federation head-

Bureau of Dairy Industry, U. S. Department of Agriculture, Washington, D. C., who will tell of the services that the Bureau over which he presides can render dairy cooperatives. Nils Olsen, newly appointed chief of the United States Bureau of Agricultural Economics will present the views of the Bureau on the outlook for dairy markets. Dr. C. B. Smith, chief of the Office of Cooperative Extension Work, U. S. Department of Agriculture, Washington, D. C., will tell how cooperatives may utilize better the services of the federal and state extension agencies. L. H. Dennis, state director of Vocational Education of the State of Pennsylvania, Harrisburg, Pa., will describe how dairy cooperatives may utilize better the facilities of vocational agricultural schools.

As a part of the program of discussing field services and membership morale, Miss Verna El-singer, director of the Home and Education Department of the Ohio Farm Bureau Federation, Columbus, Ohio, will tell how cooperatives can develop greater membership interest through community service work.

Plans for a national cooperative cream marketing agency will be outlined to the meeting by H. R. Leonard, manager of the Twin City Milk Producers' Association, St. Paul, Minnesota and H. D. Allebach, president of the Inter-State Milk Producers' Association, Philadelphia, Pa. The same theme in its relation to the national marketing of by-products will be treated by John Brandt, president of the Land O' Lakes Creameries, Inc., Minneapolis, Minn.; R. W. Balderston, secretary of the Inter-State Milk Producers' Association, Philadelphia, Pa., will discuss the report of the committee on a code of ethics for dairy cooperatives and I. W. Heaps, secretary-treasurer of the Maryland State Dairymen's Association, Baltimore, Md., will discuss the report of the committee on uniform milk ordinances.

The National Cooperative Milk Producers' Federation speaks for the major dairy cooperatives of the United States. The forty-four member organizations market the milk of over 300,000 milk producers extending from New England across the dairy belt of the nation to all parts of the Pacific Coast.



Champion British Friesian Bull "Hoeke Burings" and Champion British Friesian Cow "Hardinhal Dairymaid" at the Royal Agricultural Show in England. Not far removed from our own championship types.

22nd, in the Hotel Ballroom, promptly at 6.00 o'clock. Interesting speakers and an entertaining program is being provided. The usual charge of \$2.50 per plate will apply.

### Hotel Reservations

Arrangements for hotel reservations should be made through the Inter-State Milk Producers' Association. Headquarters will be at the Benjamin Franklin Hotel. A special rate for members and delegates has been made. Single rooms, with bath are available at \$4.00 per day; double rooms, for two persons at \$6.00 per day; special suites of two large connecting rooms, with bath between, four to six persons in a room, (Continued on page 8)

quarters will be at the Hotel Peabody.

In addition to the general business program of the Federation, addresses will be made by a number of prominent speakers, included among whom are the following:

Dr. C. W. Larson, managing director of the National Dairy Council, Chicago, Illinois, who will discuss "How to Increase Milk Consumption." John D. Miller of Susquehanna, Pa., president of the Federation, will treat the question of consolidation in the dairy industry at length in his annual address. Ollie E. Reed, the newly appointed chief of the



## THE ROYAL AGRICULTURAL SHOW AT NOTTINGHAM, ENGLAND

By ROBERT W. BALDERSTON

Americans attending the World's Dairy Congress in London the past summer, had the opportunity of visiting the Royal Agricultural Show at Nottingham. There they saw much of interest. Live stock held the centre of the stage. The three thousand animals were of superior quality. Many breeds of horses, cattle, sheep and hogs were shown, some of which are unfamiliar to us. For instance, we do not know the Suffolk horses, the Blue Albion, the Longhorn (see illustration) or the South Devon Cattle. Likewise we do not see "Gloucestershire Old Spot" or "Long White



"Angelina Lascelles"  
First Prize Long Horn Cow

Lop-Eared-Hogs" in our American. The Shire and Suffolk horses in their show rings or at work in field or cart are actively moving and beautifully built animals. I was amazed at the rapid open walk of the Shire plow-teams on the farms. Competition was very keen in all the classes of horses at the show.

All breeds of beef animals had full classes and only a very superior animal could win. The predominance of the Shorthorn, Herford and Angus is as great as at our own "International" at Chicago. Many visiting Americans spent their time on the judging day around the judging rings. Since all judging is done in one day, we regretted not being able to see all the dairy breeds judged, so as to learn more of the English standards of conformation, and to compare the animals with those entered in our own National Dairy Show.

The Dairy Shorthorns predominated. They are the great dairy breed of England. The first prize cow "Wild Eyes

Dairymaid 2nd" pictured on this page, and others in the ring were evidently real dairy animals.

The Channel Island breeds are not very widely kept in England where the popular ideal has always been the "dual-purpose" animals, such as the Shorthorn,—one that will produce a good beef calf, give moderate amounts of milk of average test and be sold as a fair quality of beef when profitable milk production days are over. The small number and inferior quality of the entries in these breeds were in direct proportion to the relatively slight popularity with the English dairymen of Jerseys and Guernseys. The Grand Champion Jersey cow, "Wotton May Moon" pictured on this page was considered by many Americans at the ringside to be a very high class animal, judged from English, Island or American standards.

Then there were the little Irish breeds,—the Kerrys and the Dexters,—animals of which the females are mature at about 600 pounds. These are business-like little fellows that thrive on the Irish hill farms and are said to be very economical users of roughage. They are kept in England by a few gentlemen more or less as a hobby.

Ayrshires too are shown at the English Royal Show,—largely by Scotch exhibitors. There are also some very



Wild Eyes Dairymaid 2nd,  
Grand Champion Dairy Short Horn

good herds in England. The contests were very keen in the Ayrshire classes and quality very good.

In many ways the most interesting dairy cattle ring judging was that where the British Friesians were shown.

Animals of this breed, which was imported into England from Holland, keeps very closely to the Netherlands standards—much more so than their American cousins, also imported from Holland. The American Holstein-Friesians have in a human generation been bred to quite different lines. The American bull, for instance is more open, more wedge-shaped and less beefy. While the Holstein-Friesian cow as exemplified by the Holstein-Friesian Association of America in its true-type standards is a more refined animal than the British or Holland cow and with



Wotton May Moon  
Grand Champion Jersey Cow

more distinct dairy characteristics. The Grand Champion cow and bull of the Royal Show are pictured on page 1 of this issue. A photo of another type of bull which would have won over the Grand Champion in an American Show, some judges said, is given on this page. He is Northdean Hollander 4th.

The exhibits of the sheep and hogs were very interesting. One does not realize the extent of the sheep-growing industry in England until one sees the many flocks in the pastures. Several English breeds of bacon hogs are familiar to us and some others are quite similar to the heavier American breeds.

English farm machinery is quite different from our American models so an English exhibit contains much of interest. There are all kinds of machines for planting, cultivating and harvesting beets and roots. Several unfamiliar harrows are exhibited, intended for preparing the ground for grain. A rotary swath-turner is apparently more popular in England than the hay-tedder or

side-delivery rake as an aid in drying the hay. English farm machinery looks somewhat heavy and perhaps cumbersome, but very durable. All prominent American makes were on exhibition, too, and have a wide market in England and other European countries. I saw no manure spreaders—that job is still done by hand, and other like labor-savers were not much in evidence.

The World's Dairy Congress had a large pavilion at the Show devoted entirely to machinery for milk distribution and milk products manufacture. This was frequented by visitors from all over Europe. Many American manufacturers were among the exhibitors.

English Royalty always aids in making such events successful. The King visited the show one day and the Prince of Wales the next day. Both exhibited in numerous classes animals from their own breeding farms. "Side Shows" are kept away and everyone seems deeply interested in the educational features of the occasion.

American visitors came away feeling that their English cousins have a splendid show, and that in many lines they are keeping in the very forefront of livestock progress. When we remember the many breeds of animals from which America has obtained the blood lines in Great Britain we can give thanks



"Northdean Hollander 4th"  
British Friesian Bull

for the care, forethought and intelligence that have gone into English animal industry for centuries and from which we are reaping such a rich harvest of successful dairying and livestock farming in the United States.

## JUNIOR BREEDERS IN NEW JERSEY

### AWARDED PRIZES AT TRENTON FAIR

Young breeders of live stock in New Jersey received awards totaling over \$1,000 in premiums and sweepstakes at the Trenton Inter-State Fair recently. These prizes were presented by the New Jersey State Department of Agriculture through the Frelinghuysen Fund, to young breeders who have secured their purebred stock through this fund. Forty-nine prizes were awarded to owners of cows and calves and thirty-five to young pig breeders.

The prize winners of the cow and calf show include:

#### Holsteins

Junior calves—First prize, Howard J. Stelle of Trenton; second prize, Carlton Lawrence of Inlaytown; third prize, Carlton Lawrence; fourth prize, Curtis Johnson of Trenton; fifth prize, Charles E. Brauer of Hackettstown.

Senior Calf—First prize, George W. Allen of Cranbury; second prize, Carl-

ton Lawrence; third prize, Elizabeth Schanzlin of Washington; fourth prize, Horace Tindall of Hamilton Square; fifth prize, Margaret Tindall of Washington Square.

Junior Yearlings—First prize, Stanley White of Cranbury.

Senior Yearlings—First prize, Alva Perrine of Cranbury; second prize, Carl Patterson of Ringoes; third prize, Henry Hammond of Englishtown.

Heifers—First prize, Chester Tindall of Trenton; second prize, Charles E. Brauer of Hackettstown; third prize, Erna Johnson of Trenton; fourth prize, J. Alfred Reed of Trenton; fifth prize, Robert Fleege of Cranbury.

Cows—First prize, Chester Tindall; second prize, Theodore Schanzlin of Washington.

Sweepstakes—Won by Chester Tindall.

#### Ayrshire

Heifers—First prize, Leon Brady of Lambertville.

Calves—First prize, Leland Chamberlin of Netcong.

#### Guernsey

Junior Calf—First prize, Alex Hewitson of Trenton.

Senior Calf—First prize, Milton Schlossberg of Burlington; second prize, Edmund J. Smith of Allentown; third prize, Edwin Forsythe of Medford; fourth prize, Elizabeth M. Patrick of Quinton.

Senior Yearling—First prize, Robert L. Merrick of Farmingdale.

Heifers (two-year old)—First prize, Alex Hewitson of Trenton.

Heifers (three-year old)—First prize, N. B. Phillips of Lambertville; second prize, Edwin Forsythe of Burlington.

Sweepstakes—Won by Dorothy Gardner of Yardville.

#### Jerseys

Junior Calf—First prize, George Sav-

idge of Hopewell; second prize, Ruth Hughes of Cranbury.

Senior Calf—First prize, Margaret Kendall of Jamesburg; second prize, Charles Davison of Cranbury.

Junior Yearling—First prize, William V. Rodgers, Crosswicks; second prize, Harry Adams of Trenton.

Senior Yearlings—First prize, Edgar Savidge, Jr., of Pennington.

Heifers (two-year old)—First prize, George Savidge of Pennington; second prize, Charles Davison of Cranbury;

third prize, Warren Ewart of Cranbury; fourth prize, Sylvan Carson of Trenton.

Heifers (three-year old)—First prize, Clarence Lambert of Three Bridges; second prize, Ruth Hughes of Cranbury.

Calves—First prize, Sylvan Carson.

Bulls—First prize, Alvin Croshaw of Hightstown.

Sweepstakes—Won by George Savidge of Pennington.

## OFFICIAL NOTICE TWELFTH ANNUAL MEETING OF THE STOCKHOLDERS OF THE

# Inter-State Milk Producers' Ass'n Thursday and Friday, November 22nd and 23rd, 1928

At the Benjamin Franklin Hotel  
9th and Chestnut Streets, Philadelphia, Pa.

BUSINESS SESSION, THURSDAY AT 10:00 A. M.

In accordance with the By-Laws, the Stockholders of the Inter-State Milk Producers' Association will meet at the Benjamin Franklin Hotel, 9th and Chestnut Streets, Philadelphia, Pa., Thursday morning, November 22nd, 1928, at 10:00 A. M., for the purpose of filling vacancies in the Board of Directors, Hearing Reports of Officers and for the transaction of such business as may be necessary.

H. D. ALLEBACH, President  
R. W. BALDERSTON, Secretary

### PROGRAM

10:00 A. M. Election of Directors  
Reports of Officers and Auditors  
Report of Testing Department

2:00 P. M. President's Annual Address  
Discussion of Market Conditions  
Addresses by Prominent Dairy Leaders

### SPECIAL ENTERTAINMENT FOR THE VISITING LADIES

Beginning at 10:00 A. M.

At Association Headquarters, Flint Building, 219 N. Broad Street, Philadelphia

### ANNUAL BANQUET

Benjamin Franklin Hotel

NOVEMBER 22nd, 1928, at 6:00 P. M.

12th Anniversary Program Special Entertainment New Dairy Council Plays

BANQUET TICKETS \$2.50

### FRIDAY, NOVEMBER 23rd, 1928

8:00 A. M. Visits to Local Milk and Ice Cream Plants  
Visits to Offices of the Inter-State Milk Producers' Association and Philadelphia Inter-State Dairy Council.

10:30 A. M. General Public Session.  
Addresses—Details as to speakers in next issue of the Milk Producers' Review.

### PROXY FOR STOCKHOLDERS INTER-STATE MILK PRODUCERS' ASSOCIATION

INCORPORATED 1917

REGISTERED

WITH

CORPORATION TRUST COMPANY OF AMERICA  
WILMINGTON, DELAWARE

### PROXY STOCKHOLDERS' MEETING

Know All Men by These Presents,

That I, the undersigned, being the owner of

shares of the capital stock of the corporation above named, do hereby

constitute and appoint my true and lawful attorney in my name, place and stead, as my proxy, at the annual meeting of the stockholders of the said corporation to be held on the Twenty-second day of November, 1928, and on in the Benjamin Franklin Hotel, 9th & Chestnut Sts., Philadelphia, Pennsylvania, on Thursday, the Twenty-second day of November, 1928, and on such other day as the meeting may be thereafter held by adjournment or otherwise, according to the number of votes I am now or may then be entitled to cast, hereby granting the said attorney full power and authority to act for me and in my name at the said meeting or meetings, in voting for directors of said corporation or otherwise, and in the transaction of such other business as may come before the meeting, as fully as I could do if personally present, with full power of substitution and revocation, hereby ratifying and confirming all that my said attorney or substitute may do in my place, name and stead.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this

day of , 1928

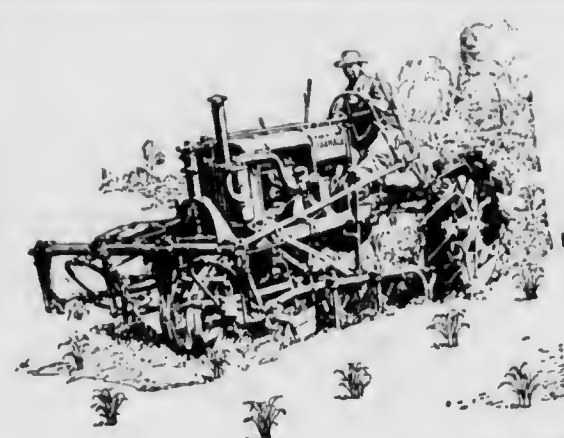
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.....(Seal)









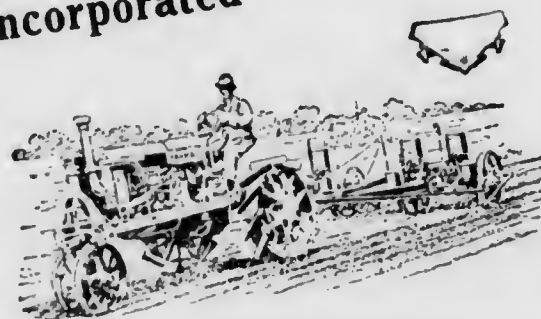
## TRAINLOADS OF FARMALLS

There is a new tractor for the farmer. It widens the scope of power farming, because it plants and cultivates row crops. It also does all the other power jobs on the farm—plows, disks, pulls spreaders, binders, drills, corn pickers. Literally does everything. In fact eliminates the need for horses on the farm at all. This tractor is the McCormick-Deering Farmall.

The Farmall has become so popular that entire trainloads have been shipped to practically every branch of the International Harvester Company. Trainloads of Tractors at a time. Because farmers have recognized the McCormick-Deering Farmall as the Tractor of today.

**The International Harvester Company  
of America, Incorporated**

The Philadelphia, Baltimore and  
Harrisburg branches received train  
loads of Farmalls



A Timely Poster

## To Produce Clean Milk

Clean Stables  
Clean Cows  
Clean Milkers  
Clean Utensils

## Did You Wash Your Hands?

**Altoona Bureau  
of Health**

Illustrating a method employed by the Altoona Bureau of Health, Altoona, Pa., to improve the milk supply of that city. These posters were sent to every shipper of milk supplying that city.

### Farms Showed Improved

#### Returns Last Year

A slight improvement in the financial returns of farms last year is shown in the annual survey of farm returns by the Bureau of Agricultural Economics, United States Department of Agriculture. Reports from 13,859 farms in all parts of the country show an average net return of \$1,290 for the year 1922 as compared with an average return of \$1,133 on 13,475 farms in 1921.

Gross receipts were larger than in 1921, expenses were about the same in both years, and the cash balance was higher than in 1921. The net return of \$1,290 compares with \$1,297 for 15,330 farms in 1921; \$1,205 for 15,103 farms in 1922; \$1,021 for 16,183 farms in 1923, and \$917 for 6,094 farms in 1922.

The average size of the farms reporting for 1922 was 275 acres with an average investment of \$15,445. Average gross receipts were \$2,505, consisting of \$978 from sales of crops, \$851 from sales of livestock, \$638 from sales of livestock products, and \$38 from miscellaneous other items.

Average current cash expenses in 1922 totaled \$1,457, consisting of \$397 for hired labor, \$238 for livestock bought, \$243 for feed bought, \$64 for fertilizer, \$49 for seed, \$180 for taxes on farm property, \$129 for machinery and tools, and \$157 for miscellaneous items.

Receipts less cash expenses averaged \$1,048, in addition to which these farmers used home-grown food products valued at an average of \$273. The value of fuel used and of house rent was not reported. On the other hand, the total expenses (\$1,457) does not include any allowance for the labor of the farmer and his family, which was estimated by the farmers at an average value of \$769.

The cash balance of \$1,018 represents all the cash the average farm made available to the owner-operator to pay his living expenses, take care of debts and make improvements.

The farmers reported an increase of \$252 in inventory sales, which figure added to the cash balance of \$1,018 made a farm net return of \$1,290. Out of this amount \$201 was paid as interest on indebtedness, and \$128 was spent for improvements.

### Supply-and-Demand

#### Balance In Dairy Products Is Close

In dairying the national demand at present is almost in balance with the supply. Our dairymen, according to Dr. A. F. Woods, director of scientific work of the United States Department of Agriculture, produce in a year as much as the Nation consumes in 363 days. Importations are just about equivalent to a two-day supply. From this it is evident, Doctor Woods says, that too great stimulation of production would soon result in over-production and falling prices.

To increase the demand for dairy products seems to be one of the most feasible methods of advancing the business. It is believed by doctors and nutrition specialists that, on the average, the American people do not consume more than about half the fluid whole milk necessary to the maintenance of the highest degree of health and resistance to disease, especially tuberculosis, rickets, and related troubles. If organized dairymen could educate the public to the values of the greater quantity of milk in the diet it would open up a large field for dairy expansion.

### Test 22,249 Cows

#### To Find Good Ones

Sixty-three Pennsylvania cow testing associations tested 22,249 cows during July, the Pennsylvania State College dairy extension service announces. Two Chester county associations led. The West Chester association tested 679 cows and the Chester Valley group tested 525.

There were 2,589 cows that produced more than 40 pounds of butterfat, and 3,428 gave more than a 1000 pounds of milk. Of the 40 pound group, 633 cows produced more than 50 pounds of fat, and 1,457 cows passed the 1200 pound mark in milk production.

Wayne association led in the number of 40 pound cows with 82. The White Deer Valley association in Lycoming county was second with 74. For 1000 pound milkers the latter group led with 124, and the Warren county association was next with 120.

C. B. Dayton, of the Sesquehanna No. 1 association, had the best individual milker, a registered Holstein which gave 2,452 pounds. The highest individual cow in butterfat production made 88.3 pounds. She was a registered Holstein owned by Daniel Ronberger, of the Dauphin association; Bedford, with 64 pounds, had the highest 10 cow average in butterfat.

Calling of "boarder" cows continued during the month, 153 unprofitable cows being sold to the butcher.

### Government Dairy

#### Cows Make Good Records of Production

As a part of the experimental work in dairy-cattle breeding by the Bureau of Dairy Industry, United States Department of Agriculture, production records are kept of all animals in the herds owned and managed by the bureau. These herds are located at Beltsville, Md., Huntley, Mont., Ardmore, S. Dak., Woodward, Okla., and Iberia, La. Two of the major dairy breeds are represented, namely, Holstein and Jersey.

At least two records are made of each animal, one at an early age and one when mature. Since these projects were started in 1919, a total of 297 official yearly records of purchased cows have been completed. Of these records, 190 were made by the 147 Holsteins with an average yearly production per cow of 15,277 pounds of milk and 523 pounds of butterfat at an average age of 4 years and 1 month. The 84 head of Jerseys had 107 records with a yearly average of 9,151 pounds of milk and 500 pounds of butterfat per cow at the average age of 3 years and 11 months.

### 60 Years of Milk Cows

1867—Smallest number of milk cows reported on Pennsylvania farms in 60 years—657,362.

1870—Lowest average value per head—\$20.24.

1908—Largest number reported—1,152,000.

1923—Highest average value per head—\$102, and highest total value—\$88,065,000 — Pennsylvania Department of Agriculture.

## Milk for Health

## EUROPEAN METHODS OF MILK PRICE DETERMINATION

### Arranging Milk Prices in Europe—by R. W. Balderston

The method (or lack of it) by which a local fluid milk market arrives at prices for milk is always an interesting detail when studying conditions in other areas, either in one's own country or abroad.

In England, one naturally thinks first of London. Here there has been a modified "Philadelphia Selling Plan" in operation for about five years—ever since the Philadelphia market was investigated by a committee of English dairymen and the value of the Philadelphia Plan appraised by them to meet, in large measure, London market conditions.

The agreement is made by a sales committee of the National Farmers' Union, representing the producers, and a committee of London distributors, representing the dealers. Prices to farmers usually are somewhat lower than in the Philadelphia territory, likewise prices to consumers. Milk prices are always influenced, as in United States, by the prices of other standard dairy products. Probably the range of farmers' prices for fluid milk in England would show a greater advantage over the prices of milk for butter and cheese if there was a greater emphasis by the health authorities on sanitary standards of production. The milk prices in other cities are generally very closely in line with London prices being directly influenced by every price change in London, the great primary market of the country.

The farmers supplying Glasgow, Scotland, have filled the need for local facilities for handling surpluses. A surplus disposal plant for manufacturing has been opened and the dealers are furnished only such amounts as they need for regular daily distribution. The methods employed by this cooperative association would seem to be very much like those of the Twin Cities Milk Producers' Association in St. Paul, Minn.

In the Netherlands, there is always such a great dominance of butter and cheese influence in the markets, the fluid milk markets of the country seem to follow very closely butter and cheese values. The Netherlands are essentially a very strong producing area for dairy products, so that the local markets for fluid milk are comparatively unimportant.

In Paris, France, the price arrangement is under the supervision of the Prefecture of Police. A committee is under appointment named by the police authorities to represent producers, distributors and consumers. When any one of the parties feels the price is not satisfactory, a conference is called for and the matter discussed by the above described Committee. If a change is agreed upon the committee announces the fact and this announcement governs future price conditions. Conferences are only held when conditions warrant discussing a change.

In Germany milk distribution methods are quite varied. In some cities, there are many small distributors each buying independently from his producers. In such cases, as we noticed, there was a committee or conference representing all groups that considered and arranged milk prices.

In some other cities there was a dominant company or cooperative handling a large proportion of the business. In still others, the city itself owned a part of the capital stock of a large plant that served a very large proportion of the inhabitants with milk and dairy products.

In these cases, too, there were commissions or conferences that arranged prices, but naturally the managers of the large plant dominated all other distributors interests. However, having on its board both public officials, farmers and milk dealers, the chief aim of such corporations is service and profits are often limited to amounts necessary for replacement and expansion.

In one city, Lubeck, where the dominating distributing agency controls 70% of the business, the price to producer and to consumer is arranged weekly. This practice was started during the post-war "inflation" period when values changed rapidly and, proving successful, has been kept in effect. Each Wednesday, the committee meets and after ascertaining by phone the price of butter on the Hamburg market, a certain formula is applied to these prices and the resultant milk price for the ensuing week to producer and consumer announced in the local newspapers.

In some markets there are two prices as in the Philadelphia market, one for the regular amount necessary for local fluid milk consumption and one for surplus. In others the amount or proportion of surplus is considered in arriving at the "spread" of the dealer for the period. All over Germany it was recognized that there is a very close relationship between prices in adjacent markets. Any local deviation up or down from the price in neighboring areas will always bring too much or too little milk into the market as the local price is substantially higher or lower than neighboring price levels. Consequently there is always a careful canvas of general market conditions on the part of any committee in arriving at a local price arrangement. Experimentally and with an open mind toward methods of procedure, efforts are being made in some places to purchase milk according to quality applying to the farmers' price a graduated scale of additions. In this arrangement are included bonuses based on all such items as butterfat content; bacteria content as revealed by the Reductase Test and the direct count method; the alcohol curd test; sediment test, etc.

While such experiments are but in the introductory stage, they indicate that as time goes on and technical methods are perfected, more attention will be given in price arrangements to the various items that are considered to be included in the term QUALITY.

Milk prices in Germany seem at present generally lower than in England and much lower than in the United States. In one market, the farmers complained that at 4c per liter (slightly more than a quart) there was difficulty in making ends meet.

After discussing methods of price determination with dairy leaders in all these countries, one is impressed with their remarkable similarity in certain important aspects. First, the public interest in this matter is generally recognized and protected; second, a uniform fair price to all producers and consumers in a given area is for the best public advantage; third, more and more consideration is being given to the matter of quality in milk, and more and more thought to methods of applying a quality basis to the price arrangement.

Even a hasty survey of some European markets reveals one very important fact respecting the subject of fluid milk price determination—namely that many economic and social principles of value to us in the United States are to be discovered from time to time in the future by keeping in touch with the progress of events abroad.

## LOWEST FEED COST HIGHEST PRODUCTION

in Washington County C. T. A.

on

## AMCO FEED



**FEEDING AMCO 24% DAIRY, Mr. J. C. Ray.**  
R. D. #1, Hickory, Pa., had the highest average production and the lowest feed cost in the Washington County Cow Test Association for the year ending December 1, 1922.

Mr. Ray's seven grade and registered Holsteins averaged 12,202 lbs. Milk and 361.8 lbs. Butterfat for the twelve months. His total feed cost was 87 cents per hundred pounds of Milk and 29 cents per pound of Butterfat. On every dollar he invested in feed, he made \$3.13.

This low feed cost and high return on the feed investment were largely possible because Mr. Ray used a feed—AMCO 24% DAIRY—which gave him the price advantage of changing feed markets in its flexible formula.

The sound economy of Amco flexible-formula feeds is being proved today on thousands of farms where cows are milked for a livelihood. Mr. Ray's experience is typical. He says: "I tried several kinds of feeds, but could not get my feed cost down to where I thought it should be. Three or four years ago I began using Amco feeds, and last year I fed AMCO 24% DAIRY, using 1 pound of feed to 4 pounds of milk. I find my feed bills are considerably lower, my production is good, and my cows are in better flesh than ever before."

If you haven't an Amco Agent in your community, write to the address below.

DIVISION OFFICE: MUNCY, PA.

## AMCO

FEED MIXING SERVICE

AMERICAN MILLING COMPANY  
EXECUTIVE OFFICES: PEORIA, ILL.  
Plants at: Peoria, Ill.; Omaha, Neb.; Owensboro, Ky.  
Alfalfa Plants at: Powell, Garland, and Worland, Wyo.



## FARQUHAR "Non-Wrap" SPREADER

MAKES AN  
Even Distribution  
THEREBY

### Producing Greatest Yield for the Farmer

EVEN DISTRIBUTION is possible only when beaters deliver an even stream to the distributor. The "Non-Wrap" Beaters of this spreader positively assure complete pulverization and regular, even feed no matter how heavy or light the application.

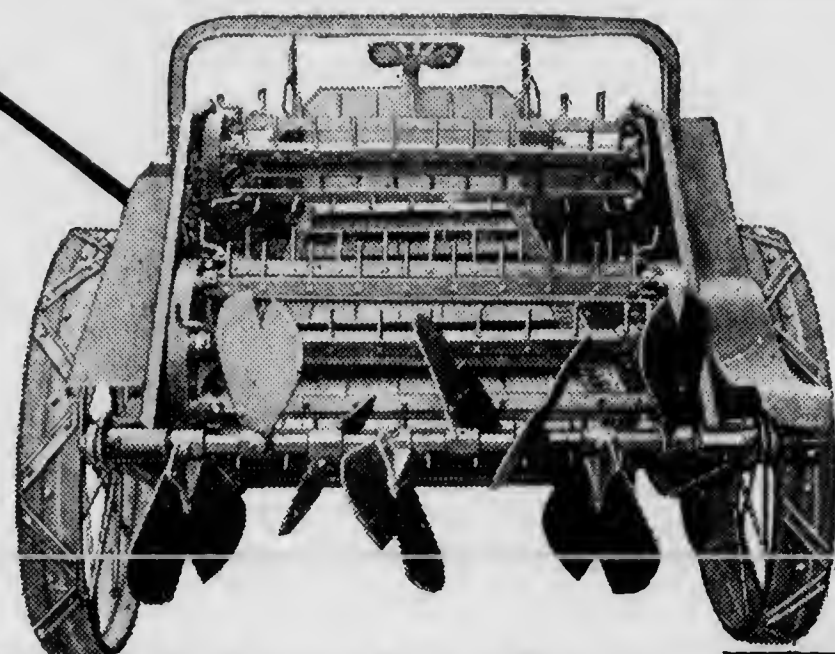
Uniformly increased fertility brings more money to the farmer. He spends less for labor, saves time, and hauls manure when it is most convenient, for no matter what kind or condition of the manure, the "Non-Wrap" makes an even distribution.

It is distinctly to your interest to know about the "Non-Wrap" Spreader. Write today for Big Bulletin.

A. B. FARQUHAR CO., Limited

Box 828

York, Pa.



## HERE and THERE About the TERRITORY

Abbotts Dairies, Inc., have let the contract for the construction of a new milk plant at Port Allegheny, Pa. This plant will replace an old plant operated at that point by the Abbotts Company for a number of years. The new plant will be a duplicate of the plant at Curryville, Pa., and it is reported that it will cost in the neighborhood of \$40,000.

Farmers in Talbot County, Md., are watching with interest the progress of the construction of the new plant of the Abbotts Dairies at Easton. Some delay has been experienced in receiving materials. It is expected that the plant will be ready for the installation of machinery in a very short time.

Dairymen who have been delivering milk to the Smyrna plant of the Scott-Powell Dairies have been transferred to the Clayton, Del. plant. A breakdown in the machinery at the Smyrna plant is responsible for the change.

A new company is making a bid for milk in the vicinity of Middletown, Del. It is said that they will manufacture cheese. The old plant of the Middletown Farms Company which has been in financial difficulties for a number of years has finally stopped operating entirely, and has been taken over by the new company and is being equipped to manufacture cheese.

The Supplee Wills-Jones Milk Co. has under preparation a new moving picture primarily for use among their drivers, illustrating the methods by which it obtains its milk supply and prepares it for the consumer. Many of the country scenes were taken on the farm of Dr. Clyde King at Westtown, Pa.

Schools for milk wagon drivers are becoming quite popular. The Dairy Council is backing the problem of teaching milk wagon drivers to be real salesmen. A course extending over a period of ten weeks, with meetings once a week, are scheduled for each group of drivers. Several such schools are now being operated in Philadelphia. One has just been completed in Wilmington, Del., and a second school is now in progress in the same city.

Officials from the United States Department of Agriculture are at the present time studying the problems of dairy barn lighting and ventilation in the Pennsylvania section of the Inter-State territory. It is expected that a number of valuable suggestions on lighting and ventilation will be offered as a result of the work they are now doing. Dairymen who are interested in these vital problems, affecting the health of their animals, may receive help and suggestions from the Department representative by getting in touch with the Dairy Council office.

### Southwest Corner

Radio Fan—"Do you carry B-eliminators?"

Clerk—"No, sir, but we have some good roach powder and some fly swatters."

—Woman's World.

## Twelfth Annual Meeting Inter-State Milk Producers' Association (Continued from page 1)

separate beds, at the rate of \$2.50 per day per person. Make your reservations at once through the Entertainment Committee. Frederick Shangle, chairman, Flint Building, 219 N. Broad St., Philadelphia.

Detailed programs of the entire two days session will be printed in the November issue of the Milk Producers' Review.

### The Membership at Large

Members of the association at large should make every effort to attend this annual meeting of the association. Participate in the election of directors. Eight directors term of office expire with this meeting, whose successors are to be elected. Become familiar with the methods of your association. It will broaden your vision of cooperative effort, and enable you to meet fellow members who have been active in the development and management of problems which have done much to further the successful operation of your association.

### College Dairy Herd

#### Boasts Record Cows

Penn State's dairy herd is now composed of 163 animals. Prof. A. L. Beam, of the dairy husbandry department, reports.

There are 63 Holsteins, 43 Jerseys, 32 Ayrshires, 24 Guernseys, and one Brown Swiss in the college herd, which is maintained primarily for instruction and research purposes.

Among the outstanding animals is Option's Ima Daytonia, an 8-year-old Jersey, which has won four gold medals for her production prowess. Her best record is 15,918 pounds of milk and 792.7 pounds of butterfat in one year. Two other Jerseys, Penstate Miriam Pogis and Oxford's Barzic of Meadow Brook, are the state champions in their respective classes.

Among the Ayrshires, Sir Robert's Romona Bell, a junior 4-year-old, holds the world's record in her class. Penhurst Marian is the fourth highest Ayrshire in her class in the United States and is the winner of a French cup. Other French cup and silver medal winners are Bell of Borgenoch 4th, Penhurst Molly Keystone, and Penstate Bell.

### Balance Farm Crops

Where a proper balance between cultivated, legume, and small grain crops is maintained, a real crop rotation results. This will aid in the maintenance of a productive soil.

Eighty-five cents per bushel is the amount fixed by the Canadian Wheat Producers, Ltd., Winnipeg, as the initial payment for wheat delivered to the 1928 pool. This payment is on the basis of No. 1 Northern wheat at Fort William. For the past four years the first advance has been \$1.00 per bushel, but the low prices prevailing at the present time make it impracticable for the sales agency to make so large an advance and maintain its strong financial position.

Owners have kept cows for twenty years without making a cent from them. After a year's membership in a dairy improvement association the cows usually begin to keep the owners.



## PROSPERITY FOLLOWS THE DAIRY COW

### Dairy Show at Memphis

There is still plenty of time available for you to attend the 1928 National Dairy Show, to be held in Memphis, Tennessee, October 13th to 20th, inclusive.

This show will be held in connection with the Tri-State Fair and the National Cotton Show. The National Cooperative Milk Producers' Federation will also hold its Twelfth Annual Meeting in the same city on October 15th to 19th.

These meetings, held during the period of the show—together with the Show itself, should be sufficient inducement for many of our readers to attend Memphis, Tennessee, during the period of the show and meeting.

Progressive dairy farmers will enjoy the wonderful display of more than 1200 of the world's finest purebred cattle that come from the leading dairies of the country to compete for honors in the show ring. Demonstrations and educational exhibits, both of pure bred and grade animals, will show how to improve herds and increase profits. Two hundred calves owned by boys and girls in the 4-H Club work from many states will make their own show, as a part of the Club Program of the Exposition.

Special railroad rates to the Show are in effect from all sections of the southern and central states. In Pennsylvania, Maryland, Delaware and New Jersey special certificate rates of 1½ fare for the round trip apply. When special rates from the above states apply it will be necessary to have a special certificate which may be obtained by applying to the National Dairy Exposition, Chamber of Commerce Building, Memphis, Tennessee.

## Report of the Field and Test Department Inter- State Milk Producers' Association.

The following statistics show the aggregate operations of all the Inter-State Milk Producers' Association field men in connection with testing, weighing and general membership work, for the month of August, 1928.

No. Test Made	7263
No. Plants Investigated	49
No. Membership Calls	339
No. New Members	
Signed	92
No. Cows Signed	538
No. Transfers Made	23
No. Meetings Attended	4
No. Attending Meetings	254

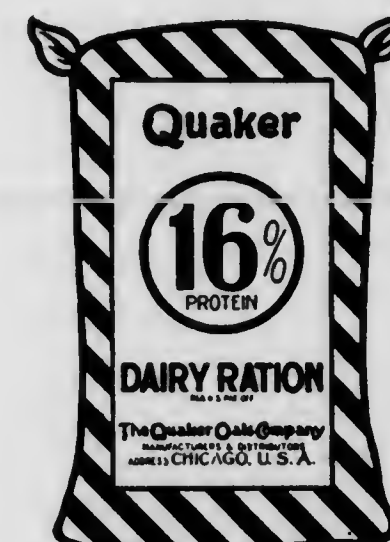
### Cut Corn Stubble Low

Cut corn low in the corn borer infested area. A stubble not over two inches high is recommended. Also be sure to cover all stalks and stubble completely when plowing.

Without good farm land there can be no fat purses for farmers.

BUY THE FEEDS IN STRIPED SACKS

No Scoop  
Shovel can  
equal this  
Great Feed



Essential minerals in just the right form and proportion—and molasses in dry form—are contained in this feed. Palatable, digestible, and profitable!

LAY away your scoop shovel for the winter. You can't hope to mix any ration so good for your herd and bank account as Quaker (16%) Dairy Ration. Quaker has gathered the choicest ingredients, and with scientific formula and method prepared for you this *proved ration* that is rich in essential nourishment, and minerals, that the cow must have to give maximum milk. Quaker Dairy Ration is always uniform, always fresh, always ready just as it comes from the sack. Why waste your time, your labor, why risk your herd when a supply of Quaker Dairy Ration is waiting for you at a nearby Quaker Dealer?

### Quaker Sugared Schumacher Feed

Just the feed for combining with Quaker (16%), or Quaker Big Q (20%), or Quaker Boss (24%), or any high protein concentrate. Sugared Schumacher is a choice feed for young or dry stock; an entire grain ration for horses, and a splendid fattening ration for steers, lambs and swine.

Made by The Quaker Oats Company Chicago, U. S. A.

BUY THE FEEDS IN STRIPED SACKS

Have you read this issue of the Milk Producers Review?

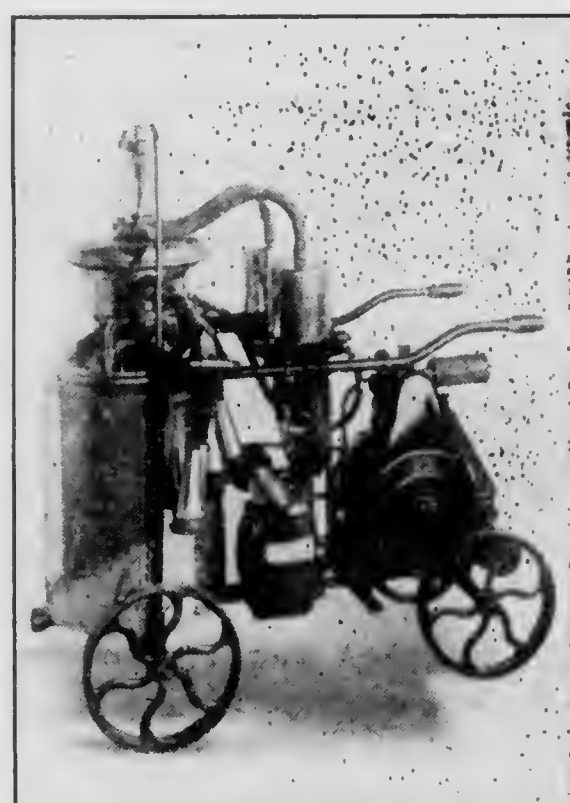
Have you read the advertisements in the Milk Producers Review?

This issue carries interesting information.

By the way—when writing to advertisers always advise them that you read their "ad" in the Milk Producers Review.

## STOP drudgery and MODERNIZE YOUR DAIRY

—WITH THE—  
DUPLIX VISIBLE gas or electric MILKER



No other Milker has all these features.  
No other MILKER can have them.

1st SQUEEZE and SUCTION—like a calf feeds—combined with total release of vacuum between each milking stroke.

2nd. A MEASURED FLOW from each cow *separately visible*. You know just how fast you are milking each cow.

3rd. INSTANT ADJUSTMENT OF VACUUM to each cow's need. Overmilking of the easy cow is *unknown* with DUPLEX.

4th. AUTOMATIC SHUT OFF OF VACUUM on each cow separately *when the milk flow stops*. Continued suction on an empty udder is *impossible* with DUPLEX.

DUPLIX DAIRY EQUIPMENT CO.  
BATH, N. Y.

Please send me (without cost or obligation) your circular and your SPECIAL OFFER which I agree to consider confidential.

Name.....  
Address.....  
R. F. D. No..... No. cows milked.....

### A SPECIAL OFFER NOW

To only ONE actual DAIRYMAN in each community. The first responsible party who answers can profit by so doing.

SEND COUPON TODAY

## Philadelphia Inter-State Dairy Council

The various departments are at your service and will assist you in planning

## EDUCATIONAL ENTERTAINMENT

for your Community, Local or Club Meetings. Lectures, Speakers, Motion Pictures, Lantern Slides, Etc.  
Write us for detailed information and program.

R. W. BALDERSTON, Sec'y, 219 North Broad Street, PHILADELPHIA





### Inter-State Annual Meeting

Plans for the Ladies' Annual Meeting held in connection with the Inter-State Milk Producers' Association are taking shape.

A Hospitality Committee has been appointed, consisting of

Mrs. Robert F. Brinton, chairman,  
Mrs. H. D. Allebach,  
Mrs. Fred Shangle,  
Mrs. A. B. Waddington,  
Mrs. F. M. Twining,  
Mrs. C. I. Cohee,  
Mrs. R. W. Balderston.

This committee is planning to hold a meeting for the ladies on the morning of Thursday, November 22nd, at 10 o'clock in the offices of the Association.

This will be an opportunity for the ladies to see and become acquainted with the new offices in the Flint Building, which are more roomy, airy and attractive than the old quarters.

A cordial invitation is extended to any one interested in milk and the committee hopes there will be a large attendance.

Luncheon will be served there as heretofore. A very interesting program is being prepared.

As the Flint Building is so much farther than the Boyertown Building—there will be transportation provided to the Benjamin Franklin after lunch for all who want it and will notify the chairman.

### The Charm of Cleanliness

Beauty standards are still changing, according to Antoinette Donnelly, newspaper writer on beauty and health. This is the way she describes an attractive girl of today:

"Every little detail of person and dress perfect—that's the girl. Nails, gloves, handkerchief, hosiery, dress, heels, stockings, teeth, skin and hair just right. A teasing bit of perfume, faint, elusive. A handbag when opened spick, span and orderly. But above all, a freshly tubbed air.

"My theory about beauty isn't that every woman can make a ravishing creature of herself. I mean she can't be a great, outstanding beauty unless she has been especially endowed. But so many more women could be so much more beautiful than they are if they'd use the advantages that are so close at hand.

"This feature of exquisite cleanliness is one of them. The beautiful thing about babies isn't their little button noses, nor their undeveloped eyebrows, nor their rounded little stomachs. It's the pure joy of freshness they exude after their bath and powdering—their clean little dimity frocks, and leafy gums and tongue.

"While one can't quite capture their childish charm, one still can be beautifully fresh and clean in person and dress. It is the one great beauty gift to be had for the asking."

"Theodore Roosevelt once said: 'This country will not be a good place for any of us to live in unless we make it a good place for all of us to live in.'"

### "Potato Thoughts"

Potatoes are here! To the right of us, and to the left of us is this favorite vegetable so plentiful and so palatable.

The very thing for a cool evening is the scalloped dish. Potatoes make a most tasty one that nicely fills the need of the main dish.

#### Potato Scallop

6 potatoes 1-4 tsp. pepper  
2 tsp. flour 2 tsp. butter  
1 tsp. salt 2 c. milk  
Select medium sized potatoes, wash and pare them carefully, and slice them thin.

Arrange the slices of potatoes in layers in a buttered baking dish, sprinkling each layer with flour, salt, pepper, and bits of butter. Add the milk.

#### Potato Roulettes

2 c. hot mashed potatoes  
2 eggs 1 tsp. salt  
1-2 c. hot milk 1 c. grated cheese.  
Add the milk and the salt to the potato and mix thoroughly.

Fold in the beaten eggs and then the grated cheese.

Bake in buttered ramekins in a moderate oven.

### From a Noted Teacher

"A clean house means clean people and a clean community.

"There is a moral value in cleanliness not to be expressed in dollars and cents. In all ages and in all religions there runs a thread of the elevating effect of clean hands, of eating in a clean place, or from clean dishes as well as of keeping one's self clean. It is as though man, in his effort to reach up higher, lifted himself from that close contact with earth and waste, and with his fellowmen, to a higher level. There is a psychological element here worth noting. No man can be self-respected and dirty at the same time. Clean dirt, or the smut of the coal heaver, or iron rust of the machinist, is not meant.

"One might say that the cost of uncleanness was the loss of the higher sense of manhood, of the ambition to rise in the social scale, of the will to do great things.

"Personal cleanliness should be looked upon as a social obligation.

"The risks of infection are great enough under the prevailing careless habits to make cleanliness a good insurance policy.

"We are not making a plea for greater cleanliness merely for the sake of aesthetic values, but to make life more effective."

From "The Cost of Cleanness," by the late Ellen H. Richards.

### Cook Cabbage Carefully

Cabbage, onions and celery, of all vegetables, lose most of their minerals in cooking. For this reason they should be eaten raw or cooked with great care. Cabbage should be boiled a very short time, just long enough to make it tender. Cooking cabbage for an hour leaves it not only brown and unattractive, with a disagreeable and unnatural flavor, but also makes it difficult to digest. If correctly boiled, cabbage is excellent when creamed, scalloped, cooked in rolls or served merely with butter, salt and pepper. Onions baked in their skins retain their natural flavor as well as their minerals and the greater part of their vitamins. Celery boiled twenty to thirty minutes in very little water is delicious creamed or scalloped.

### Homespun Yarn

Elastic goods will last longer if washed with a soft brush and soap, rinsed thoroughly and hung to dry slowly at room temperature.

Soap sets many fruit stains. Boiling water is generally sufficient.

A cheap tin tray may be converted into a useful and decorative article for your dining room if it is enameled in a color which will harmonize with your china.

To preserve the nutritive value in vegetables, baking is the best method of cooking. Potatoes, squash, cabbage, onions and carrots may be baked successfully.



### An Old Song Brought Up to Date

"Where are you going my pretty maid?"

"I'm going a milking sir," she said.

"May I go with you, my pretty maid?"

"You may if you choose, kind sir," she said.

"What is your fortune, my pretty maid?"

"My face is my fortune, sir," she said.

"Then you are wealthy, my pretty maid!"

"Milk made me healthy, sir," she said!

### Kitchen Table Tops

Table tops suffer more hard treatment than any other part of the kitchen equipment. Often they are regarded as the place for any sort of job—grinding meat in a food chopper, cutting bread, shredding cabbage, holding hot pans and irons, and even for cracking nuts with a hammer. When the table shows the effects of such abuse the blame is often put on the make.

With intelligent care, however, most tables will prove faithful servants for years. The New York State College of Home Economics advises suiting the treatment to the table. What would not hurt an enameled iron table would prove injurious to a waxed linoleum perhaps. It is well to consider your chief uses for the kitchen table when you decide on the kind of top to have.

Enameled iron in white or tints, often called porcelain, is one of the most popular materials today for it is attractive in appearance, easily cleaned and proof against a good deal of heat. However, it may be chipped by knocks or by screwing the good chopper to it.

Waxed linoleum, a substantial and inexpensive table cover, gives excellent wear unless it is cut or burned.

Zinc covered tables stand up well under hot utensils but must be kept free from washing soda and acids. Both acids and alkalis react with zinc and rapidly destroy it.

Tables with wooden or oilcloth tops suffer mainly from cuts and scorching from hot pans or the carelessly left electric iron. Grease spots on wood also cause trouble. They may be removed only by vigorous scouring.

### Rubber Articles Need Special Care

**Wash Fabric With Warm Water**  
Proper care of rubber materials is an economy recommended to the housewife by the New York State College of Home Economics at Cornell University. Raincoats, overshoes, bathing caps, elastic goods, dress shields, rubber gloves and aprons require special care.

Under certain conditions rubber fabrics rapidly deteriorate. Intense heat, which makes rubber soft and gum-like, should be avoided. Raincoats and overshoes dried in a hot place tend to wear out quickly. Rubber aprons which come in contact with the hot stove suffer the same fate.

Wash rubber materials of all kinds in lukewarm water and dry them slowly at room temperature. To clean rubberized raincoats, lay them flat on a table and scrub both sides with a soft brush, cool water and soap. Wipe them off with clear water of the same temperature and hang them out to dry without wringing. Elastic goods and dress shields may be cleaned the same way. Rubber fabrics should never be ironed. If they need to be dried quickly, use talcum powder.

Mild soap will not harm rubber if great care is taken to see that it is rinsed off thoroughly and not allowed to dry on the material. Alcohol, chloroform, gasoline, turpentine and benzine should never be used.

Most rubber articles tear easily so that it is well to use a soft brush when washing them, and to hang them on hangers rather than hooks.

### Two State Institution Farms Have Abortion-Free Dairy Herds

The dairy herds at the Laurelton State Farm and the Pennsylvania Industrial Reformatory at Huntingdon are now free of bovine infectious abortion and have been issued certificates, according to the State Bureau of Animal Industry.

The Laurelton herd consists of 48 cows and the Huntingdon herd, 61.

While the dairy herds in connection with all State institutions are being tested and handled in accordance with the Pennsylvania plan for the prevention, control and eradication of bovine infectious abortion, only the two State herds have qualified for certificates to date.

### Philadelphia Inter-State Dairy Council Incorporated

**General Offices**  
Flint Building, Philadelphia  
A cooperative movement established for the dissemination of information and publicity pertaining to the production and distribution of dairy products and their food value in nutrition.

**Affiliated with the National Dairy Council**

**Officers**  
Dr. Clyde L. Kine, President  
H. D. Allebach, Vice President  
R. W. Balderston, Executive Secretary  
R. J. Harrison, Jr., Treasurer

**Departmental Branches**  
C. I. Cohee, Director Quality Control Department  
Lydia M. Broecker, Nutrition Department  
Del Rose Mavan, Dramatic Department

# Figuring ahead...

TAKE MY ORDER FOR ENOUGH COW CHOW TO HOLD UP MY PRODUCTION ALL YEAR



# ....and getting ahead

You can save money on your Cow Chow bill this fall and winter by following this plan—

- 1-Figure ahead on how much Cow Chow you will need for the whole winter.
- 2-Tell the checkerboard feed dealer. He can save you money on quantity orders.
- 3-Arrange to take it off the car as you need it. That will save you what the dealer would otherwise have to charge for handling, hauling and storage.

Figuring ahead—that's the plan thousands of dairymen are using today in getting ahead.

And figuring ahead will make Cow Chow worth still more to you.

Ask the checkerboard feed dealer for his quantity prices off the car.

PURINA MILLS, 854 Gratiot St., St. Louis, Mo.  
Eight Dunny Mills Located for Service

Write us for a Purina Cow Booklet—free

# PURINA CHOWS

Cows - calves  
hogs - steers



sheep - horses  
poultry

### Milk Good for Chickens

In experiments conducted by leading authorities it has been found that milk products fed to poultry maintain the body weight of fowls in the most efficient manner, increase the size of the eggs, reduce the tendency toward early molting by increasing production, and maintain a more even production throughout the year.

Giving your dairy barn a good system of ventilation now means healthier stock and purer milk in the winter.

### Willing to Oblige

Dietitian—"Yes, a few lettuce leaves, without oil, and a glass of orange juice. There, madam, that completes your daily diet."

Mrs. Overweight—"Thank you so much, Doctor, but do I take this before or after meals?"—London Passing Show.

Dairy improvement associations have grown in number from 120 to 522 in the past 8 years, and in number of cows tested from 40,000 to 142,084.

### Cumberland County

Holds Dairy Show  
Cumberland County, Penna., held its Third Annual County Dairy Show at Mt. Holly Springs, on August 22nd and 23rd. There were 255 head of Holstein, Guernsey and Ayrshire cattle shown; four educational dairy demonstrations; forty exhibits from fourteen townships in the county and a livestock judging contest in which 75 persons participated. Upwards of 5500 persons attended the show during the two days.



## WHITEWASH WITH WARNER'S "LIMOID"

Healthy cows to give pure milk must have clean,  
fresh, sanitary stables.

Mix water and Warner's Limoid to proper consistency and you have a perfect whitewash which will spread nicely with a brush or can be sprayed without clogging nozzles.

Sold in 10-lb. and 50-lb. paper bags. "Limoid" can be stored indefinitely without deterioration or fire risk. Ask your dealer or write direct.

**Charles Warner Company**

ODD FELLOW BLDG.  WILMINGTON, DEL.

## DAIRY AND POULTRY FEEDS CUSTOM GRINDING DAY AND NIGHT

To provide better service our mill is now open continuously from 7 o'clock Monday morning to 12 o'clock Saturday night. Closed only on Sundays, holidays and the nights immediately following those days. Feeds packed in paper bags for cleanliness and your convenience.

**J. R. WYCKOFF CO.**

LAWRENCEVILLE, N. J.

TELEPHONE 121

## 65 17th Public Sale 65 Bradford County Registered Holsteins

Sale Pavilion, TROY, PA.

FRIDAY, OCTOBER 26th, 12.30 P. M., 1928

45 Cows Fresh or due soon. 12 Heifer Calves and Yearlings 8 Bulls  
Federal Tuberculin Tested Cattle, most of which are Fully Accredited  
60 Day Retest Privilege

Many cows in this sale have Cow Testing Association records as also the dams of many of the entries have Cow Testing Association Records

FOR CATALOG APPLY TO

R. H. FLEMING 315 MAIN STREET TOWANDA, PA.  
A BREEDER'S SALE - 20 CONSIGNORS

TRADE  
MARK

# NICE

REG.  
U.S.A.

THE NAME TO GO BY—WHEN YOU GO TO BUY  
PAINT AND VARNISHES  
Write for color Cards and Booklet "Paint Pointers"  
EUGENE E. NICE COMPANY, Inc., PHILADELPHIA



### Tuberculin Tested Milch Cows

Subject to 60 day retest

Registered and High Grade

Immediate Delivery

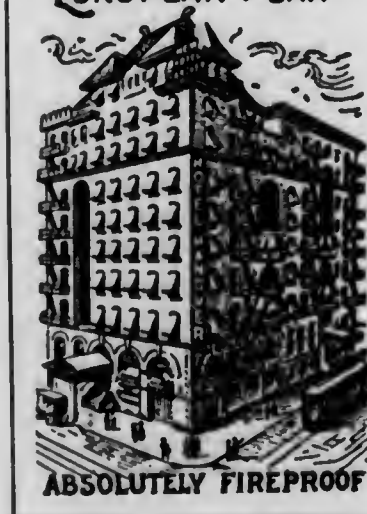
Anderson's Sale & Exchange Stable

Edinburg Road

R. F. D. 2, TRENTON, N. J.

Bell Phone 3099 R2

EUROPEAN PLAN



## The HOTEL HANOVER

ARCH STREET at TWELFTH  
PHILADELPHIA, PA.

One Block from Reading R. R.  
Two Blocks from Penna. R. R.

Rooms \$2.00 and Up

Special Luncheon \$ .50 Special Dinner \$1.00

W. C. FONTAINE, Pres. & Mgr.

### Penn State College Bond Issue By D. M. Cresswell

A wave of sentiment that is increasing each day is sweeping the State of Pennsylvania favoring passage on November 6 of the proposed Constitutional Amendment No. 2 for a bond issue of \$8,000,000 for new buildings at the Pennsylvania State College.

It was over five years ago that this method was proposed by members of the State Legislature as a means for emergency financing of college building needs. The proposal passed two sessions of the General Assembly and is now ready for the vote of the people of the State. The method of financing is recommended because it will give State College an assured building income for an efficient and economic construction program over a period of years.

Farmers, especially, are anxious that the State College bond issue be passed. Not only does agriculture lead all other occupations for parents of the 4000 Penn State students, but rural people have come to count upon State College supplying them with results of research work taken to them through one of the best agricultural extension services in the United States, and they have in the College the only collegiate school of agriculture in Pennsylvania, the third largest of its kind in the United States. It is pointed out at the college that agricultural research work, such as that which gave farmers "Pennsylvania 44 wheat," is each year bringing to Pennsylvania agriculture far greater returns than the total amount of annual state appropriations to the college for all purposes.

Because of its evident appeal and service to future generations, Amendment No. 2 has been approved by the Pennsylvania State Grange, the State Education Association, the American Legion, and a score or more of other organizations, including many agricultural societies. E. B. Dorsett, Master of the State Grange, in a number of addresses throughout the state has urged that the Legislature can finance the bond issue through immediate retirement of bonds.

"Let us pass that State College bond issue," he says, "and then if it is thought desirable, let the State retire the bonds from current revenue as they are issued, and there will be no excess expenditure in this method of relieving a most worthy institution. Some of its buildings are in worse shape than little country school houses, where the college should have the best of any land grant college in the country. Every member of the Grange and every farmer should vote 'Yes' for Amendment No. 2 on November 6."

### Humus in Soil Stores Water

One of the important explanations of the desirability of having a quantity of humus or decomposing organic matter in the soil is found in the capacity of humus for soaking up and storing water which is thus made available later for use by growing plants. Experiments have revealed that 100 pounds of sand can hold only 25 pounds of water, and 100 pounds of clay soil can hold only half its weight in water. In contrast, 100 pounds of decaying organic matter may hold as much as 190 pounds, or nearly twice its weight of water. Most soils are mixtures in varying proportions of sand, silt, clay, and organic material. As a rule the greater the proportion of organic matter contained in the soil the greater its water-absorptive capacity.

### National Honor Comes To 653 Keystone Herds

When the National Dairy Exposition opens its doors to the public at Memphis, Tenn., October 13 to 20, 653 Pennsylvania dairymen will be honored for the outstanding butterfat production of their herds during the year ending July 1, 1928.

For several years the National Dairy Association has awarded honor certificates to all cow testing association members whose herds average more than 300 pounds of butterfat per cow for the year. During the year ending July 1, 1928, there were 335 certificates won by Keystone dairymen. The next year 428 qualified, and this year 653. This is a gain of 225 herds over 1927, or 52.5 per cent. Prof. Pitts of State College says that 73 of the honored herds produced more than 400 pounds of butterfat per cow, and that this number is 41 herds more than in 1927, or 128 per cent increase.

The high herd for the year was that of H. A. Snyder, of Montourville, whose 15 cows averaged 526.4 pounds of butterfat. Among the counties, Mercer heads the list with 51 herds. Bradford is next with 41, Tioga third with 37, and Chester fourth with 35 herds. Cumberland, Sullivan and Union counties tied for fifth place with 23 herds each.

For individual associations, the Cumberland and Union county groups tie with 23 herds each for first place.

### Report of the Quality Control Department Philadelphia Inter- State Dairy Council.

The following is a report of the work done by the Quality Control Department of the Dairy Council, for the month of August, 1928.

No. Inspections Made...3105  
No. Plants Inspected...9  
Sediments Tests...1013  
No. Permanent Permits  
Issued...111  
No. Temporary Permits  
Issued...65  
No. Meetings Held...1  
Attendance...150  
Bacteria Tests Made  
(Plants)...10  
Man Days at Fairs and  
Exhibits...1.5  
No. Miles Traveled...20,841

During the month 35 dairies were discontinued from selling for failure to comply with the regulations—5 dairies were reinstated before the month was up.

To date 112,727 farm inspections have been made.

### Penna. Authorities Detect New Butter Fraud

We have often heard of "watered stock," "watered milk," etc., but now comes a new one—"watered butter." The plan has been developed by certain middle men to rework western sweet cream butter and thus introducing large quantities of water.

The Pennsylvania Pure Food law prohibits the sale of butter containing more than 16 per cent water and less than 80% butter fat in butter and provides a heavy fine for adulteration.

Recently inspectors of the Department have discovered sales of "butter" in which the water content varied from 25 to 39 per cent.

## COW TESTING ASSOCIATIONS

### MIFFLIN COUNTY ASSOCIATION

The Mifflin County (Pa.) Cow Testing Association completed its sixth year on August 1st, 1928, with 24 whole year members. Many of the members have had a considerable increase in production of both milk and butterfat, since the organization of the association. All of the members fed grain to their cows during the summer months.

During the past year thirty-four profitable cows were sold while thirty were disposed of for meat purposes. Eight cows reacted to the tuberculin test and five cows died. There were 329 cows in the association during all or part of the year.

The report of the association was as follows:

Year	No. of Cows	Lbs. of Milk	Lbs. of Fat
1921	7470	274.7	274.7
1922	6971	270.8	270.8
1923	7064	280.	280.
1926	180.74	8380	305.
1927	213.40	8955	308.1
1928	251.49	9392	332.9

The results for the members are as follows:

Average No. of cows in the Association	Lbs. of milk	Lbs. of Fat
251.49	9392	332.9
Average Per Cow:	Lbs. of milk	Lbs. of Fat
3.5	Percentage of butterfat	332.9
\$251.26	Value of Product	3.5
54.69	Cost of Roughage including Pasture	54.69
60.81	Cost of Grain	60.81
115.60	Total Cost of Feed	115.60
138.66	Value of Product above feed cost	138.66
2.20	Returns for \$1 expended for feed	2.20
1.23	Feed Cost per 100 pounds of milk	1.23
.35	Feed Cost per pound of butterfat	.35

Following is a grouping of all cows producing over 300 pounds of butterfat. These cows are grouped as follows:

Group I	Above 500 lbs. butterfat	6 cows
Group II	Between 400-500 lbs. butterfat	25 cows
Group III	Between 300-400 lbs. butterfat	104 cows

### HUNTINGDON COUNTY COW TESTING ASSOCIATION, Penna.

The Huntingdon County C. T. A. finished its first year June 1, 1928, with thirty whole year and one part year member. The Association has completed a very successful year and a large number of unprofitable cows have been disposed of. There were sold seven cows for dairy purposes. Twelve cows reacted by tuberculin test and were disposed of. Five cows died and fifty-one unprofitable cows were butchered. There were 474 cows in the Association during all or part of the year.

The Association was in operation for two years in 1921 and 1922. The results for the two years and the present year are as follows:

Year	No. of Cows	Lbs. of Milk	Lbs. of Fat
1921	271.20	6202	251.7
1922	265.20	6225	240.8
1928	351.93	7618	293.2

The results for the Association are as follows:

Average No. of Cows in the Association	Lbs. of Milk	Lbs. of Fat
351.93	7618	293.2
Average per cow:	Lbs. of milk	Lbs. of Fat
3.8	Percentage of butterfat	89.2
\$236.87	Value of Product	3.8
45.95	Cost of Roughage including Pasture	45.95
41.85	Cost of Grain	41.85
87.84	Total Cost of Feed	87.84
149.03	Value of Product Above Feed Cost	149.03
2.70	Returns for \$1 expended for feed	2.70
1.15	Feed Cost per 100 lbs. of Milk	1.15
.30	Feed Cost per pound of Butterfat	.30

The following is a grouping of all cows producing over 300 pounds of butterfat:

Group I	Above 400 lbs. butterfat	21 cows
Group 2	Between 300-400 lbs. butterfat	119 cows

### SALEM COUNTY, (N. J.) COWS MAKE HIGH AVERAGE

The Salem Herd Improvement Association recently completed its year with twenty-five herds making the following association averages:

Number of cows with twelve month records	364
Average Milk per Cow	8,655 lbs.
Average Butterfat per Cow	318 lbs.
Average Grain Consumed per Cow	2,500 lbs.
Average Grain Cost per Cow	\$ 54.00
Average Roughage Cost per Cow	\$ 65.00
Average Total Feed Cost per Cow	\$119.00
Average Feed Cost per 100 lbs. Milk	\$ 1.37

The average returns per cow over feed cost for the 13 herds with the highest herd averages amounted to \$209 while the average returns per cow over feed cost for the cows belonging to the 12 lowest herds amounted to \$150. The herd averages ranged all the way from 11,834 lbs. of milk and 421 lbs. of fat to 5104 lbs. of milk and 254 lbs. of fat. It was worth \$41 per cow to be in the top 50 percent instead of in the lower 50 percent. It is needless to state that a determined effort will be made by most of the owners of the lower yielding herds to get them up to higher levels.

Seventeen herds produced over 300 lbs. of fat per cow and hence qualified for a diploma from the National Dairy Association and for a Ribbon of Merit from the New Jersey Breeds Association. The owners of these herds are: A. L. Waddington, J. W. Ridgway, H. M. Flitteraft, R. Shinn, J. J. Pettit, Davis Bros., Joe Bell, G. A. Coombs, J. S. Abbott, R. B. Harris, Lester Harris, Oscar Gauntt, J. C. Pettit, A. S. Gauntt, F. C. Pettit, C. W. Kirby, C. H. Bassett.

Some of the progress made in recent years is indicated by the figures which follow:

Year	Lbs. Milk per Cow	Lbs. Fat per Cow	Cost of Feed	Feed Cost of 100 Lbs. Milk	Average Milk Price
1926	7796	272	\$120	\$1.55	\$3.30
1927	8079	283	116	1.44	3.15
1928	8655	318	119	1.37	3.67

It is a well known fact that there is a marked difference in individual cows; that in every herd there is a high cow and a low cow. The dairy extension office of the New Jersey Agricultural College has been attempting to discover the average difference in efficiency between these highest and lowest producers. A study of 10 associations has recently been made aggregating 240 herds and 4030 cows—only those cows on test a full year. The records of the highest producing

Tastes  
good—  
watch  
'em eat!



If food tastes good—more food is eaten. That goes for cows as well as humans. Authorities say that the palatability of a dairy feed increases digestibility and therefore its nutritive value—also, that palatability is important in increasing the production of milk. It is a well-known fact that the more feed a good cow eats the more milk she will give.

UNION GRAINS can now be bought in five forms. Every one of them is highly palatable. Eight different concentrates—exclusive of the minerals and molasses—are used in making UNION GRAINS. Such a mixture assures a tasty feed—and cows like it. Moreover, the mixture insures a completeness of protein that is essential to the health and heavy productivity of the cow.

There are no oat hulls, oat feed, mill screenings or any other kind of mill off in UNION GRAINS. None but the choicest, most wholesome ingredients are used in any of the five types of these outstanding feeds. One of the five UNION GRAINS will fit into your feeding program—no matter what you use as roughage.

For instance, if your cows are on pasture, feed 16% Sweet UNION GRAINS.

If you feed alfalfa, clover, soy beans or pea vine hay, buy 20% Sweet UNION GRAINS.

With mixed hay and corn stover, with or without silage, 24% Dry or 24% Sweet UNION GRAINS will give the desired balance.

If you feed timothy hay and corn stover, with or without silage, and have some corn or oats to add, 32% Sweet UNION GRAINS will make the ration completely balanced.

Figure it out for yourself—raise what feed you can economically—then buy the particular UNION GRAINS that will produce the proper ratio between protein and carbohydrates for the correct balance.

### Write for UNION GRAINS

#### Feeding Program

We will outline a complete feeding program for you if you will tell us what you raise for roughage and how many cows you have. We will also supply UNIKO Milk Record Charts free of cost. Address

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Dept. L-22 Cincinnati, Ohio



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THE FIRST DAIRY FEED MADE

Makers of UNIKO World Record Feeds

UNIKO All-Mash System  
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UNIKO World Record Egg Mash  
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UNIKO Scratch Feed  
UNIKO Pig and Hog Ration  
UNIKO Horse Feeds  
Union Grains Dairy Rations  
And other UNIKO World Record Feeds

24% Dry. 16%, 20%, 24%, 32% Sweet.

cow of each herd are added together and averaged. The records of the poorest cows are handled in like manner. The results of the Salem study in this connection are fairly typical of those from the other associations.

#### Comparison of Highest and Lowest in Each Herd

	Lbs. Milk	Lbs. Fat	Lbs. Grain	Feed 100 lbs. Milk	Feed Returns Cost of Over
Av. of High Cow in Each of 25 Herds	11,669	433	2716	\$131	\$1.12
Av. of Low Cow in Each of 25 Herds	5,727	210	1821	102	1.79

Thus it appears that the best cow in each of these herds averaged to be more than twice as efficient as the lowest one. In fact the best made almost three times the profit of the poorest.

### Trends in Dairying

States relatively unimportant in the field of dairy product manufacturing increased their importance in 1927 as compared with the previous year, according to statistics compiled by the United States Department of Agriculture. The important dairy States of Minnesota and Wisconsin did not increase their production in 1927. The total amount of creamery butter manufactured in the year was 1,496,495,000 pounds, an increase of about 45,000,000 pounds over 1926. Iowa achieved a substantial in-

crease. "In general," says the Bureau of Agricultural Economics, "increases are reported in the less important butter-producing States, particularly in the South, the Northwest, and the far West, in which sections it has been generally known the dairy business has been increasing rapidly in recent years."

The manufacture of dry milk in 1927 was nearly 30 per cent greater than in 1926. There was an exception to the general record of increased production of dairy products, as a slight decline is recorded.





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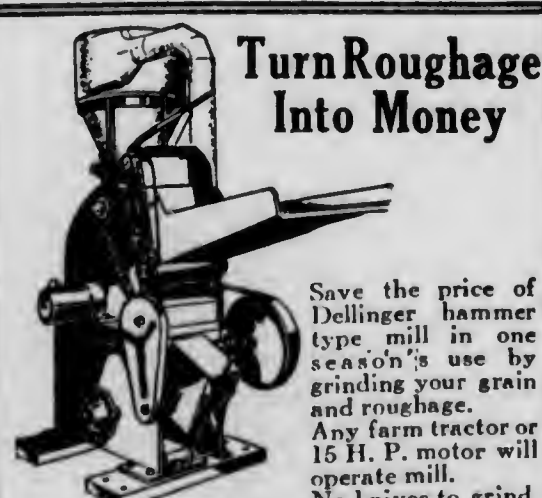
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Save the price of Delinger hammer type mill in one season's use by grinding your grain and roughage. Any farm tractor or 15 H. P. motor will operate mill. No knives to grind. Large capacity. Sold on guarantee to do the work in satisfactory manner to customer.

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A. M. DELLINGER  
727 N. Prince St. Lancaster, Pa.

## National Association of Food Control Officials Adopt Resolution Defining Colored Cooking Compounds as Oleomargarine.

The National Association of Dairy Food and Drug Officials of the United States in annual convention recently held at Hartford, Conn., has officially recognized that the so-called colored cooking fats are, in fact, Oleomargarine, and should be taxed and their manufacture and sale controlled in the same way that Oleomargarine is taxed and controlled.

The following resolution was unanimously adopted by the convention:

"WHEREAS, our city, state and federal governments have enacted laws for regulating and controlling the manufacture and sale of all articles of food made in imitation or semblance of other well known food products, and,

WHEREAS, in very recent years, there have appeared in our markets, certain fat compounds, labelled and branded shortening products and purporting to be intended for shortening and cooking purposes only, and

WHEREAS, these products are compounds of vegetable oils, chiefly coconut and peanut oils, water, salt and a yellow color, made in imitation or semblance of butter, and are being sold as and for butter, therefore,

BE IT RESOLVED, That it is the sense of the Association of Dairy Food and Drug Officials of the United States, that these products are oleomargarine, as defined in the federal oleomargarine law, and are subject to all of the provisions of all laws regulating the manufacture and sale of imitation food products.

BE IT FURTHER RESOLVED, That this Association endorses H. R. 10956 of Congress, known as the Haugen Bill—"A BILL To amend the definition of oleomargarine contained in the act entitled, An Act defining butter; also imposing a tax upon and regulating the manufacture, sale, importation and exportation of oleomargarine, approved August 2, 1886, as amended, which is a bill clarifying the meaning of what constitutes an imitation of butter."

A much greater quantity of high-grade alfalfa could be produced and marketed profitably in the United States, the United States Department of Agriculture believes, if producers would study market demands and make their production and loading practices conform to the market requirements. Hay dealers in all the big alfalfa-distributing markets receive each year thousands of orders for high-grade alfalfa hay which can not be filled because of an insufficient quantity of hay of this grade. The chief demand for baled alfalfa hay is from dairymen, and large numbers of them who now depend largely upon milk feeds as sources of protein would doubtless become buyers of alfalfa if supplies of a high-grade hay were available.

### Testing Tells Story

Wasteful feeding too often follows lack of information on production. The good producing cow does not get enough and the poor milker gets too much feed for profitable production. Testing tells the story of production related to feed requirements.

## Kinship of Farm Tenant and Landlord Significant

Farm tenancy has steadily increased since 1880, when the census first made a separate enumeration of owners and tenants, until now tenant farmers comprise 38.6 per cent of all farmers in the United States. While the rate of increase has not been so large in the last decade, except in certain sections of the country, the already large percentage of tenant farmers is viewed with apprehension by some who fear a tenant agriculture.

It is therefore desirable to know who the tenants are and something of their opportunities for becoming landowners. Tenants who rent farms from relatives are much more likely to be interested in the farm and the community than those who are renting from nonrelatives. A study of landlords indicates that 84 per cent of tenants related to landlords in the North and West are either sons or sons-in-law; in the South the comparable figure is 60 per cent. The son or son-in-law may pay the same rent as any other renter, but he has some interest in the farm, and in most cases in the community.

Among the States in which the number of tenants is large, Wisconsin has the highest percentage related to the landlord, approximately 40 per cent, while North Dakota is the lowest, with slightly more than 20 per cent. In more than half the counties of the Central States above 30 per cent of the tenants are related to their landlords. In the extreme Eastern and in the far Western States a larger proportion of counties have a lower percentage of related tenants.

The fact that so large a proportion of tenants are relatives of their landlords is significant, says the department, because such tenants are likely to have a degree of concern in the upkeep and care of farms comparable with that of an owner operator, and many are operating as tenants preparatory to assuming the full ownership of the property by inheritance or some other mode of acquisition.

## Valid Trespass Sign in Pennsylvania

The Pennsylvania Department of Agriculture receives inquiries from time to time on the proper wording of a valid trespass sign.

A type of notice believed to be valid when prominently posted about the premises, one combining both the warning of the 1905 Trespass Act and the 1925 Stealing Act, is the following:

**NOTICE!**  
No Trespassing or Stealing Allowed

All persons are hereby notified and warned neither to trespass on these premises under penalty of a fine not exceeding \$10.00 as provided by the Act of April 14, 1905, P. L. 169 and its amendment; nor to take, steal or carry away any property whatsoever under penalty of a fine not exceeding \$500.00 and imprisonment not exceeding three years, as provided by the Act of May 1, 1925, P. L. 440.

Owner or Lessee  
This signature should be in ink.

## USE FEEDS CONTAINING OBERCO FRANK LUPO MARYLAND DAIRYMAN

**Says:** "I have had less abortion, less retained afterbirth, and higher production since feeding my cows"

## OBERCO ORGANIC MINERALS

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ABORTION, retained afterbirth, weak calves and other breeding troubles are most frequently caused by lack of sufficient minerals in the feed. Grain feeds cannot supply enough minerals. You must feed a mineral supplement. Our booklet "Minerals for Farm Animals," tells why minerals are necessary and why OBERCO is the most effective, digestible and economical mineral mixture.

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Baltimore, Md.

USE FEEDS CONTAINING OBERCO

## Radium Is Restoring Health To Thousands

The wonderful curative power of Radium has been known for years. However, the benefits of this precious health-giving substance have in the past been only within the means of persons of wealth.

Since the invention of Deguen's Radio-Active Solar Pad, any man or woman, poor or rich, can afford this treatment which offers so much relief from suffering and disease.

Deguen's Radio-Active Solar Pad is worn next to the body day and night. It pours a constant stream of radio-active energy into the system while you work, play or sleep, helping to build up weakened nerves and tissues to a strong healthy condition. It creates a vigorous circulation of blood, thus removing congestion which is the real cause of most diseases.

To prove just what this remarkable treatment can do for you, we will send our appliance on trial with the understanding that we will not charge you a cent if it fails to give satisfactory results. This offer is open to any person who has pain of any kind, nerve weakness, high blood pressure, stomach, kidney or liver complaint, bladder trouble, or disease of the lungs or heart.

No matter what your ailment or how long you have had it, we will gladly let you try the appliance at our risk. Write today for free literature giving complete information. Radium Appliance Co., 2889 Broadway Bldg., Los Angeles, Calif.

## for feeding calves

Do you know that you can cut milk cost in half by adopting the "minimum milk method," using dry skim milk? Hand rears of dairymen who sell all their whole milk are making this big saving. They simply mix a pound of dry skim milk with a gallon of water, making a money-saving mixture which young calves thrive on. And they buy a pound of dry skim milk for half of what they would pay for a gallon of whole milk (1 gal. whole milk contains 1 lb. milk solids.)

Write today for "Better Calves" bulletin. State number of calves you feed. We'll tell you where to buy skim milk. Remitted—1 pound dry skim milk to 1 gallon of water—is also good for pigs and poultry

## CRUMB'S STANCHIONS

Also Water Bowls  
Litter Carriers  
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I can SAVE MONEY for you. Send for booklet.

WALLACE B. CRUMB  
Box 2, Forestville, Conn.

## Sweet Milk Insurance

Better prices and bigger profits are certain when Sterilac, the ideal sterilizer, is used regularly to keep dairy barns, animals and equipment germ-free so that the milk produced will be pure and sweet.

**STERILAC** solves the sanitation problem, helps put milk production on a more profitable basis. In powder form. Easy, simple and economical. A dollar's worth dissolved in water makes a barrel of standard solution. Powerful yet non-poisonous. Keeps strength indefinitely. Ask your dealer, if he is not supplied, send \$1 and his name for enough Sterilac to make a barrel of standard solution. Do it today—it will pay you. Booklet FREE THE STERILAC COMPANY Dept. WJ North Chicago, Ill.

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in HIGHTSTOWN, N. J.  
We handle all kinds of cattle

Holsteins — Guernseys — Jerseys  
A Specialty

All cows tuberculin tested and sold subject to a 60 or 90 day retest and fully guaranteed in every respect.

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That Produce Results  
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## HOLSTEINS Dependable

Superior in production, regular in calving, noted for size and vigor, consistent in profits returned—Holsteins are known as the most dependable of all dairy cows.

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## FOR SALE Registered Guernsey Bull

An outstanding individual  
Exceptionally well bred, 2 years old.  
Communicate with  
P. W. WEDDELL  
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## Alfalfa Hay For Sale

Weights and grades guaranteed. Prompt shipment. Write for delivered prices.

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## It Pays To Fertilize A Fertilizing Crop

Green manuring is a practice growing in favor among good farmers, even in the Central and Northern States, although because of mild winters it is of greater present importance in the South. Farmers realize that this is an excellent method for increasing the fertility of their crop lands. However, the fact that this is a method of soil improvement and fertilization sometimes leads farmers to try the practice under conditions in which it can not be successful.

The object in growing a green-manure crop, according to forage crop specialists of the United States Department of Agriculture, is to produce especially on poor soil as much material as possible to turn under. On very poor soils it frequently happens that even the strongest feeders can make but poor growth, and consequently the benefit from the crop is decreased. Even cowpeas will sometimes make only a poor growth unless the plants are stimulated by an artificial fertilizer. When a legume is grown the addition of nitrogen is not usually necessary, as the legume will gather its own nitrogen; but an application of phosphorus and potash often increases the crop greatly and thus enables the plants to gather more nitrogen. The phosphorus and potash that may be applied for the benefit of the green-manure crop are not wasted either, as they will all be available for the next crop when the green-manure crop decays. What fertilizer to use and how much will depend on the soil and on the crop, but generally 300 to 400 pounds of 16 per cent superphosphate and 100 pounds of muriate of potash per acre will be found to stimulate the growth of the green manure so as to produce a larger crop than could have been grown without the fertilizer. The larger crop, if a legume, will gather more nitrogen than a small one could, and the soil will receive correspondingly greater benefit. It is also good practice to apply stable manure to particularly poor spots, so as to encourage a good growth, and thus bring the field up to a more uniform productiveness.

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## Pick Seed From Field

Select seed corn in the field. Pick only well formed and matured ears from healthy, vigorous, well-rooted plants having green stalks and yellow husks. It is a good plan to pull twice as many ears as will be needed for planting. About 15 medium-sized ears will plant an acre.

Sam Lesser, the whitewash expert just returned from Youngsville, Pa., where he has completed the whitewashing of one hundred and forty some cow stables.

Sam makes his headquarters at West Chester, Pa., and is available to whitewash cow stables at any section of the Inter-State territory. Sam, who originally hails from the Dairymen's League territory, has at the request of the Philadelphia Inter-State Dairy Council, established several whitewashing outfits in the Inter-State district.

Silage is such an essential part of the dairy ration, that too much attention cannot be paid to the treatment and ensiling of the crop.

Proved sires take the guess out of animal breeding.

## Pennsylvania Ayrshires Making Good Herd Test Production

Seven hundred and three pounds of 4.28 per cent milk, 30.12 pounds of butterfat was the average yield during July of the 102 Ayrshires owned by Penshurst Farm, Narberth, Pa. It was the highest yield recorded for a herd this size. The best individual yield was that of the seven year old Penshurst Dairy-maid, a daughter of Kat'e Champion of Penshurst, that gave 1,839 pounds of milk, 85.15 pounds of butterfat. However, the outstanding production for the month was that of the three year old heifer, Penshurst Sara 2d, a daughter of Penshurst Man O'War, with 1,807 pounds of milk, 74.27 pounds of butterfat.

Fifty-seven cows in the Masonic Homes Farm, herd at Elizabethtown made the good average yield of 712 pounds of 3.81 per cent milk, 27.17 pounds of fat.

Sycamore Farm Ayrshires, owned by Mrs. E. R. Fritsche, Douglasville, were among the highest producers for July with an average yield of 726 pounds of 3.71 per cent milk, 26.93 pounds of butterfat. High production honors in the herd were accorded the heifer, Sycamore Ideal Antoninette, that gave 1,550 pounds of milk, 60.14 pounds of butterfat.

Fifty-five Ayrshires comprising the herd of Old Forge Farm, Spring Grove, Pa., averaged 636 pounds of 4.13 per cent milk, 26.26 pounds of butterfat. The daughters of Keystone Mischief, Junior herd sire at this farm, are making very creditable production, one of these Mischief's Kala, a four year old gave 1,283 pounds of milk, 64.92 pounds of butterfat, in the eighth month of her lactation.

Barclay Farms, Rosemont, with eight Ayrshires averaged 669 pounds of 3.91 per cent milk, 26.13 pounds of butterfat.

## For a Leisure Moment

**Out of Luck**

"Albert, run to the door and tell Mrs. Jones I am out."

"Hello, Mrs. Jones. Mom's out."

"Isn't that too bad? I just came over to borrow a few eggs."

Albert, shouting up the stairs: "Mom, do you mean that you're out of eggs?"

—Exchange.

## Blurred Vision

"Do you mean to say you washed your face, Tommy?" demanded the youngster's mother.

"Yes'm," replied Tommy.

"Nonsense! It's just as dirty as ever."

"Maybe the dirt's on your glasses, mom. Wipe 'em off."

## Suggested Substitutes

Attorney—"Where was the defendant milking the cow?"

Witness—"It's hard to describe, Judge, but if you'll bring in a cow, I'll show you the exact place."

—Whirlwind.

Farm Seeker—"I thought you advertised this as a good location for dairying. There is hardly any grass for cows to eat."

Real Estate Agent—"No, but if you will look around you will see cowslips, buttercups, and plenty of milkweed."

—Our Dumb Animals.



Once again  
the enthusiastic choice  
of the  
Inter-State Milk  
Producers' Association

and once again  
preparing to merit  
that choice

The  
**Benjamin Franklin**  
Chestnut at Ninth Street  
Philadelphia

Horace Leland Wiggins  
Managing Director

## COMING

Twelfth  
Annual  
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Inter-State Milk  
Producers' Association

November Twenty-second and  
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BENJAMIN FRANKLIN HOTEL

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PROGRAM

Entertainment for You and  
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TWELFTH ANNUAL  
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A Big Feature

You Can't Afford  
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Quietness and every convenience in Philadelphia's new hotel.

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Rooms all outside and with bath. All beds equipped with box springs and Nachman inner hair spring mattresses.

Single rooms \$3.00 3.50 4.00  
Double rooms 4.50 5.00 6.00

Radio In Every Room





## De Laval—the Only Milker that Has All these Essential Features

1. The only rotary type of milking machine pump, especially designed for milker use—efficient, runs without vibration.
2. The only milker in which lubrication of the entire outfit can be accomplished from one point.
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4. The only milker with a sanitary trap, which eliminates the necessity of a vacuum tank and which collects moisture or any foreign matter and can easily be removed for cleaning.
5. The only milker with a non-adjustable vacuum controller, which prevents too much vacuum from being applied to the cow's udder.
6. The only milker with a non-adjustable pulsator that has only one moving part and operates without the use of valves, springs, weights, diaphragms, adjusting screws, and never requires oiling.

7. The only milker with a non-adjustable claw pulsator located within six inches of the udder, insuring instantaneous transmission of pulsations to teat-cups.
8. The only milker which combines alternating action with absolute uniformity of pulsations, which aids in securing the fastest and cleanest milking.
9. The only milker using simple, straight liners, with self-forming mouth pieces, which aid in obtaining the most efficient milking and are least expensive to replace.
10. The only milker with a double check valve in the pail top, which positively prevents moisture from running from the pipe line into the milk.
11. The only milker in which the air from the pulsators is exhausted over the check valve into the vacuum line, preventing it from coming in contact with the milk.
12. The only milker backed by a world-wide organization, the acknowledged leader in its field, with a record of 50 years of continuous service to the dairy industry.

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THE DE LAVAL SEPARATOR CO.,  
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61 Beale St., San Francisco

Please send me, without obligation, (SEPARATOR ☐  
full information on MILKER ☐  
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Name.....

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State..... R.F.D. .... No. Cows.....

# Milk Produce

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE

Volume IX

West Chester, Pa., and Philadelphia

No. 7

## National Dairy Exposition Held in Memphis, Tenn. Outstanding Cattle Show

The twenty-second annual Exposition under the management of the National Dairy Association was held at Memphis, Tennessee, October 13th to 20th inclusive. The exposition was held in connection with the Tri-State Fair and the National Cotton Show, held in Memphis during the same period.

Dairying, as was the case last year, comprised the outstanding features of the show. "Dairying in Dixie," dominated the atmosphere of the exhibit, although there were outstanding demonstrations in connection with the general agricultural program in that territory. Cotton, sugar cane, vegetables, small grains, legume hays and farm products of many varieties, together with farm equipment and apparatus, peculiar to the character of the agriculture were exhibited. In the live stock exhibits, in addition to the dairy cattle, were representative shows of hogs, sheep, goats, chickens, pigeons, wild fowl, and etc.

The dairy cattle show was, on the whole, one of the best that has been shown for several years. There was more type and character to the show animals. Demonstrations on the part of the 4-H Club boys and girls was distinctive.

### U. S. Department of Agriculture Exhibit

The exhibit of the United States Department of Agriculture was a noteworthy one. "The Milk Factory" was in the shape of a "talking cow." The cow was about six feet tall, its stomach, intestines, udder, heart etc., were outlined and these were pictured as a "milk factory," and the cow "talked." Talking demonstrations, from time to time outlined the functions of her body, the nature of her feed and the development in the process of milk making. Her plea was "a balanced ration for results."

In addition to this demonstration the department made a number of illustrations of pertinent facts regarding the industry. "Does Double Duty," illustrated Dairy Herd Improvement; "There Planes of Feeding," a feeding program; "Transmitting Ability of Dairy Sires," breeding program; "Sweet Clover Pasture"; "Soy Beans," "Bitter Weed" illustrated losses through off flavored milk; "Dairy By-Products," "Pastuerization of Milk;" "Shall I be a Dairy Farmer;" "Marketing Information;" and "The World's Dairy Banquet," depicting the consumption of dairy products in the leading countries in the world.

### 4-H Club Activities

The Exposition brought together a large number of boys and girls interested in 4 H Club work. They were evident in practically every branch of agriculture. In the 4 H Boys and Girls Calf Club Show, fourteen states were represented. There were over 200 pure bred animals in the competition for prizes. Teams representing vocational schools, and other club units also took part in the various judging contests.

### Butter and Cheese Awards

There were 179 entries in the contest for prizes for bresh butter. Entries

came from 25 states, Minnesota, Wisconsin and Iowa leading in numbers. The first prize and gold medal went to H. C. Ladag, Farmers Association, Tripoli, Iowa. There were 46 entries from Minnesota, 34 from Iowa and 33 from Wisconsin, all scoring 92 or higher.

In the storage butter class, three prizes with gold, silver and bronze medals re-

## National Co-Operative Milk Producers Federation Holds Meeting in Memphis, Tenn.

The National Cooperative Milk Producers' Federation, held its Twelfth Annual Meeting, October 17, 18, 19th, 1928, in Memphis, Tennessee, at the Peabody Hotel. The meetings were held during the period of the Tri-State Fair and National Dairy Show.

This meeting of the Federation covered a wide scope and had much to do

al Tariff Situation, The Consolidation in the Dairy Industry, etc.

The formal session of the Federation began on October 13th, with a meeting of the retiring board of directors to consider reports of committees and other business to be laid before the annual meeting. The concluding address was made by Dr. C. W. Larson, managing director of the National Dairy Council. The afternoon period was given to an inspection of the National Dairy Show. Wednesday morning session was largely devoted to the annual address of John D. Miller, Esq., president of the National Cooperative Milk Producers Federation and a discussion of its various features.

In his address president Miller referred to the work of the Federation during the past year, its participation in various national programs, its efforts to obtain higher tariff rates on dairy products, and etc.

"There are three subjects," he said, "that should be carefully considered by you at this meeting:—

1. A prospective over production of Milk and Milk Products.
2. Activities of the Public Health Service of the United States Treasury Department, advocating uniform Milk Regulations.
3. Consolidations and mergers of concerns engaged in buying, producing and selling milk and milk products.

Mr. Miller spoke at length on these topics and "recommended that at these meetings, ways and means be discussed for conducting an immediate campaign to bring about greater unity of farmers in their regional marketing associations."

At the afternoon meeting of the second days session addresses were made on the "Services that the Bureau of Dairy Industry of the United States renders Dairy Cooperatives," by Ollie E. Reed, chief of the Bureau of Dairy Industry, United States Department of Agriculture, Washington, D. C.

"The Outlook for Dairy Markets," was the subject of an address by Nils A. Olsen, chief, Bureau of Agricultural Economics, United States Department of Agriculture, Washington, D. C., and an address on the "Shelby County Milk Marketing Problems," by Abe D. Waldauer, attorney for the Shelby County Milk Producers' Association, Memphis, Tenn.

The third days session opened with an address by L. H. Dennis, State Director of Vocational Education for the State of Pennsylvania, in which the various problems of the program were presented.

An address "How Cooperatives Can Develop Greater Membership Interest Through Community Service Work," by Miss Vera Elsing, Director, Home and Education Department, Ohio Farm Bureau Federation, Columbus, O.

John Brandt, president, Land O'Lakes Creameries Inc., Minneapolis, Minn., made an address on "How Dairy Cooperatives may make Joint Use of Com-

(Continued on page 9)

## ALL BASIC MILK.

Basic Price Will Be Paid

FOR ALL MILK

SHIPPED DURING

November and December 1928

After conference with buyers on November 5th, 1928, it was decided that all milk shipped during November and December, 1928, would be paid for at full basic prices.

DURING THESE MONTHS

THERE WILL BE

## NO SURPLUS MILK

Present Basic Plan Unchanged

See Page 7 for Detailed Statement

spectively went to C. A. Torguson, Hadley, Minn., rating 94; Aldolph Erickson, Portland, Ore., rating 93.625; Harold Hanson, Gordonsville, Minn., rating 93.5 respectively. There were 132 entries in this class and all scores over 92 received medals or diplomas.

Medals were awarded in the higher scoring classes of the various grades of cheese. The Gold medal in the Ameri-

(Continued on page 8)

regarding future policies of the organization. Prior to the date of the called meeting several day sessions were given to the discussion of pertinent programs and policies by the Executive Committee of the Federation. Some of the problems discussed included a report of a committee on Chain Store Milk Problems, Relations with the National Board of Farm Organizations, Uniform Municipal Milk Ordinances, The Nation-



# A Story of the Inter-State Milk Producers' Association

## ITS DEVELOPMENT AND PROGRESS

### IN QUESTIONS AND ANSWERS

1. Ques. What is the Inter-State Milk Producers' Association, Inc.  
Ans. It is an organization of dairy farmers.
2. Ques. What is its purpose?  
Ans. It was organized to enable its members to mutually aid each other in more efficient marketing of their products.
3. Ques. What territory is covered by the Inter-State Milk Producers' Ass'n, Inc.?  
Ans. Pennsylvania—20 S. E. counties (as far West as Bedford and Blair). New Jersey—7 southern counties. Delaware—3 counties—entire state. Maryland—7 Eastern Shore counties, 1 Western Shore county.
4. Ques. When was the Association formed?  
Ans. A preliminary organization was effected in the fall of 1916 and an agreement with the buyers entered into. Certificate of Incorporation was signed March 14th, 1917. The Philadelphia office was opened and the first milk sold, July 1, 1917.
5. Ques. What is its corporate form?  
Ans. It was incorporated under the general incorporation laws of the State of Delaware.
6. Ques. Why was it not incorporated under special cooperative laws?  
Ans. There were none available in 1917.
7. Ques. How does it function?  
Ans. Although a general stock corporation, in point of law it functions as a collective bargaining cooperative, acting as sales agent for the milk of its members.
8. Ques. How is it managed?  
Ans. By a Board of Directors, at first fifteen in number and now twenty-four in number.
9. Ques. How are the Directors elected?  
Ans. One third of the Board of Directors is elected each year, at the Annual Meeting of the Association, for a term of three years. Each member is entitled to vote, either in person or by proxy, according to the number of shares of Capital Stock held.
10. Ques. How does the Board operate?  
Ans. The Board elects annually from its members a President, Vice-President, Treasurer and Secretary, (the Treasurer and Secretary need not be members of the Board). It also elects an Executive Committee of seven, of which the President and Vice-President are members.
11. Ques. How often do the Board of Directors and Executive Committee meet?  
Ans. The Board of Directors meets regularly at bi-monthly intervals and holds such special meetings as may be necessary. The Executive Committee meets when called together by the officers, usually once or twice between the meetings of the Board.
12. Ques. Is the Executive Committee independent of the Board of Directors?  
Ans. No, the Executive Committee has only such powers as are conferred upon it by the stockholders or the Board. All its minutes and actions are reviewed by the Board.
13. Ques. How may the By-Laws be amended?  
Ans. The By-Laws of the organization may be amended at any annual meeting of the stockholders, provided notice of such proposed amendment has been furnished in advance. They may also be amended by the Board, provided the amendment has been read in one meeting of the Board and action is not taken until the next subsequent regular meeting of that body.
14. Ques. How is the Inter-State Milk Producers' Association financed?  
Ans. It is financed by deductions of two cents (\$.02) per hundred pounds of milk sold by members to cooperating dealers. Buyers make net payments for milk purchased to producers but retain and remit to the Association, the two cents (\$.02) commission.  
(NOTE:—Cooperating buyers in addition to the above also remit two cents (\$.02) to the Philadelphia Inter-State Dairy Council for educational work, for each one hundred pounds of milk purchased; one cent (\$.01) on behalf of their producers and one cent (\$.01) per hundred pounds as their own contribution. Two cents (\$.02) per hundred pounds is likewise remitted to the Philadelphia Inter-State Dairy Council on milk purchased from non-members of the Inter-State Milk Producers' Association. This is used only for Quality Control Work.)
15. Ques. Has the rate of commission paid by the member to the Association always been the same?  
Ans. No, it was formerly but one cent per hundred pounds, the amount being increased by action of the stockholders to finance a Field and Test Department.
16. Ques. What is the relationship between the member and his Association?  
Ans. Each milk producer on joining the association must subscribe to one share of stock for each ten cows owned or kept and one-tenth for each additional cow. The smallest number of shares which a farmer may own is four-tenths. Each new member must sign a contract agreeing to let the Association act as sales agent for all milk sold by the member. The original contract is held in the Association safe and a duplicate copy with a stock certificate forwarded to the new member.  
(Read the membership contract carefully.)
17. Ques. How may the member be released from his contract?  
Ans. By giving sixty days' notice in advance of either of the semi-annual periods stated in the contract.
18. Ques. How does the Association use these contracts?  
Ans. Possession of the contracts of its members empowers the Association to bargain with buyers for the purchase of all milk offered for sale by such members.
19. Ques. Is this relationship recognized by buyers in the territory?  
Ans. In 1917 it was difficult to secure this recognition. Today it is generally recognized.
20. Ques. How does the Association sell the milk?  
Ans. The Executive Committee, which has charge of all details of sales, appoints a sales manager (at present the President is sales manager). Conferences are held with buyers. They may be called by the Association either on its own initiative or at the request of responsible groups of buyers in the territory.
21. Ques. Does the Association have a written contract with the buyers?  
Ans. No. Buyers at a conference state personally what they will do. The Association prepares a price list monthly, the receiving of this price list by the buyers is notice to them of the price to be paid to Association members.
22. Ques. What happens in the case of inability of the association and buyers to come to an agreement?  
Ans. In case of the failure to agree on the matter at issue it must be adjudicated by a recognized milk arbitrator. Usually Dr. Clyde L. King has acted in that capacity.
23. Ques. Is the agreed-upon price the same regardless of grade and quality of milk?  
Ans. No. The Association has, from the beginning, been developing a method by which farmers receive remuneration in accordance with the quality of the milk or care it is given and their ability to meet market needs as to quality.
24. Ques. What is "A" milk in the Philadelphia market?  
Ans. "A" milk is milk for which bonuses are paid for high butterfat and low bacteria count.
25. Ques. What portion of the Philadelphia supply is "A" milk?  
Ans. It is usually estimated that about one-third of the Philadelphia supply is purchased and sold as "A" milk.
26. Ques. Does the city of Philadelphia fix standards for "A" milk?  
Ans. No, it does not.
27. Ques. What is the difference in price paid to producers for milk containing different percentages of butter fat?  
Ans. Forty cents (\$.40) per hundred pounds for each one per cent of difference and four cents (\$.04) for each one-tenth of one per cent (.1 of 1%) of difference, up or down.
28. Ques. In what cities and towns besides Philadelphia does the Inter-State Milk Producers' Selling Plan operate?  
Ans. 

Penna.	New Jersey	Delaware	Maryland
Chester	Camden	Wilmington	Hagerstown
West Chester	Atlantic City		
Norristown	Trenton		
Pottstown			
Bethlehem			
Allentown			
Reading			
Lancaster			
Lewistown			
Huntingdon			
Altoona			
29. Ques. Does the Inter-State Milk Producers' Association own milk plants and do actual processing or trading in dairy products?  
Ans. No, it acts only as a collective bargaining organization.
30. Ques. How many members belong to the Inter-State Milk Producers' Ass'n?  
Ans. Previous to June, 1928, 25,655 had signed contracts. Since 1917 many who have signed contracts have gone out of the dairy business, many have died and a few have withdrawn. There are at this time approximately 20,000 members of which 14,000 are selling to cooperating dealers.
31. Ques. How many Local Units of the association are there?  
Ans. There are 285 Local Units.
32. Ques. What is their function?  
Ans. They are organized for the purpose of handling local problems and for gathering the membership together for the dissemination of market information. They have no legal status since the member contracts directly with the parent association for the sale of his milk. In addition the Local Unit elects delegates to the annual meeting of the Inter-State Milk Producers' Association, to carry the members' proxies and to act and vote in their stead in the conduct of the general business of such annual meetings.
33. Ques. What advantages have accrued to the various groups concerned in milk marketing by reason of the influence of the Inter-State Milk Producers' Association?  
Ans. 

*To the Producer:*  
The producer in the Inter-State territory has had as high a price and in many instances higher price for all his milk, than other large markets have paid over a long term of years.

*To the Buyer:*  
Having all interests (producer, distributor and consumer) working together in harmony in the Philadelphia territory, has greatly benefited the buyer of milk. He is assured of a regular supply of safe, high-quality milk. He knows what competitors are paying, and all are put on substantially the same footing as to the first cost of their product.

*To the Consumer:*  
Lack of friction between producer and distributor has been of great benefit to the consumer. The supply has been constant and dependable. The price to the consumer has been low compared with the price of other foods and lower than the price paid for milk by consumers in other large markets. While Philadelphia consumers pay only 13c per quart for "B" grade milk (September 1st, 1928) the Chicago price is 14c, the New York price 15c, the Boston price 14c and the Baltimore price 14c per quart.
34. Ques. What major services are performed for members by the Inter-State Milk Producers' Association that they could not individually perform?  
(Continued on page 3)

## OFFICIAL NOTICE TWELFTH ANNUAL MEETING OF THE STOCKHOLDERS OF THE

# Inter-State Milk Producers' Ass'n Thursday and Friday, November 22nd and 23rd, 1928

At the Benjamin Franklin Hotel  
9th and Chestnut Streets, Philadelphia, Pa.

### BUSINESS SESSION, THURSDAY AT 10:00 A. M.

In accordance with the By-Laws, the Stockholders of the Inter-State Milk Producers' Association will meet at the Benjamin Franklin Hotel, 9th and Chestnut Streets, Philadelphia, Pa., Thursday morning, November 22nd, 1928, at 10.00 A. M., for the purpose of filling vacancies in the Board of Directors, Hearing Reports of Officers and for the transaction of such business as may be necessary.

H. D. ALLEBACH, *President*  
R. W. BALDERSTON, *Secretary*

### PROGRAM

10:00 A. M. Election of Directors  
Reports of Officers and Auditors  
Report of Testing Department

2:00 P. M. President's Annual Address  
Discussion of Market Conditions  
Address by John A. McSparren, National Problems of Farm Organizations.

### SPECIAL ENTERTAINMENT FOR THE VISITING LADIES Beginning at 10:00 A. M.

At Association Headquarters, Flint Building, 219 N. Broad Street, Philadelphia

### ANNUAL BANQUET—All Seats Reserved

Benjamin Franklin Hotel

NOVEMBER 22nd, 1928, at 6:00 P. M.

12th Anniversary Program Special Entertainment New Dairy Council Plays  
BANQUET TICKETS \$2.50

For Seat Reservation—send properly filled out stubs to Entertainment Committee at earliest possible moment. See page 4.

### FRIDAY, NOVEMBER 23rd, 1928

8:00 A. M. Visits to Local Milk and Ice Cream Plants  
Visits to Offices of the Inter-State Milk Producers' Association and Philadelphia Inter-State Dairy Council.

10:30 A. M. General Public Session.  
Addresses by Dr. C. W. Larson, (The Dairy Council Movement), Dr. Clyde L. King, (Seeing the Dairy Industry Board), and Dr. Ollie E. Reed, Chief, Bureau of Dairy Industry, U. S. Dept. of Agriculture, (The Dairy Industry in the U. S.)

### PROXY FOR STOCKHOLDERS INTER-STATE MILK PRODUCERS' ASSOCIATION INCORPORATED 1917 REGISTERED WITH CORPORATION TRUST COMPANY OF AMERICA WILMINGTON, DELAWARE PROXY STOCKHOLDERS' MEETING

Know All Men by These Presents,

That I, the undersigned, being the owner of

shares of the capital stock of the corporation above named, do hereby

constitute and appoint  
my true and lawful attorney in my name, place and stead, as my proxy, at the annual meeting of the stockholders of the said corporation to be held in the Benjamin Franklin Hotel, 9th & Chestnut Sts., Philadelphia, Pennsylvania, on Thursday, the Twenty-second day of November, 1928, and on such other day as the meeting may be thereafter held by adjournment or otherwise, according to the number of votes I am now or may then be entitled to cast, hereby granting the said attorney full power and authority to act for me and in my name at the said meeting or meetings, in voting for directors of said corporation or otherwise, and in the transaction of such other business as may come before the meeting, as fully as I could do if personally present, with full power of substitution and revocation, hereby ratifying and confirming all that my said attorney or substitute may do in my place, name and stead.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this

day of , 1928

Witness: ..... (Seal)

..... (Seal)



## INTER-STATE MILK PRODUCERS' REVIEW

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1879.



The Twelfth Annual Meeting of the Inter-State Milk Producers' Association is close at hand. It will be held at the Benjamin Franklin Hotel, 9th and Chestnut Streets, Philadelphia, Pa., Thursday and Friday, November 22nd and 23rd, 1928. It is the annual general gathering of the membership of the association for the hearing of reports of the organization's year's work, for the election of directors, whose terms of office have expired and for the transaction of such other business as may properly come before the association.

It represents a gathering of the membership on the whole, either individually or by delegates of its Local Units. It represents a gathering of the folks back home, the producers of milk on the farms meeting to continue and perpetuate the development and work looking toward the continued success in the marketing of its milk.

At this meeting there will be presented a freedom of speech to every delegate and member to present views and policies looking toward the continued welfare of the organization. Every member or his delegated representative has a duty to perform. They should be present and participate in the official business of this 12th annual meeting of the organization.

Those attending this meeting also have a further duty to perform. They should carry back to their local organizations definite reports of this annual meeting, so that the local members themselves may become fully familiar with its methods, policies and operation.

In addition to these solid business affairs the association's Annual Banquet will offer an evening entertainment and education. This year there will be no long array of speakers but instead a demonstration of the educational program of the Dairy Council will be presented. There will be a new combined Inter-State and Dairy Council educational play—a demonstration of public school educational programs and other special features. A period of relaxation which we believe all will enjoy.

Make your plans to attend this annual meeting now—and if your local unit has not yet selected its official delegate, see to it that it holds a meeting and does so at once.

A large number of meetings of local units in the Inter-State Milk Producers' Association territory have been held during the past two months for the purpose of electing official delegates and alternates to the annual meeting of the association and for the election of local officers for the coming year and to transact such other business as might properly come before them.

The total number of such meetings, at which officers or representatives of the Inter-State Association have attended and made addresses numbers over one hundred. This far exceeds the number of meetings held for that purpose last year and indicates very clearly the increasing interest that the local units have in the work and development of the organization.

In addition to the election of delegates many of the local organizations elected officers to serve for the ensuing year.

The official delegate or alternate, who attends the meeting, at the expense of the association, carries to the annual meeting the message of his own local to the general membership. He will, to a large extent, carry the proxies of the local membership and act for and in their stead at the annual meeting. Delegates should carry back home to the local groups the plans and policies of the organization, so that they may become fully informed on the methods, plans and policies of the Inter-State Milk Producers' Association, not only as relates to the marketing conditions in their own territory, but in the world's markets as well.

## Banquet Seat Reservations

IN order to avoid confusion regarding the seating of our members and guests at the Banquet to be held in connection with the 12th Annual Meeting of the Inter-State Milk Producers' Association, at the Benjamin Franklin Hotel, November 22nd, 1928, at 6.00 o'clock P. M., a new system has been devised.

**Each Banquet Ticket will carry a detachable stub, covering a request for a seat reservation.**

THESE stubs must be returned to the home office, together with the name and address of the purchaser, so as to be in the hands of the committee at the earliest possible moment and not later than Wednesday, November 21st, so that proper seats can be assigned.

ON the day of the banquet, lists showing the arrangement of seats will be posted and distributed. No seats will be reserved however after the banquet service is started.

MEMBERS of the Association having banquet tickets for sale must return all unsold tickets on November 21st. After that date banquet tickets will be sold only at the headquarters office at the Benjamin Franklin Hotel and table assignments made in the order of sale.

MAKE your reservations early so that confusion in seating can be avoided.

## IT IS YOUR DUTY

To be Represented Either in Person or by Proxy

AT THE  
TWELFTH ANNUAL MEETING  
OF THE

**Inter-State Milk Producers' Association**

**THURSDAY AND FRIDAY  
November 22 and 23, '28**

TO BE HELD IN THE  
**BENJAMIN FRANKLIN HOTEL**

**9th and Chestnut Streets  
PHILADELPHIA, PA.**

The Annual Meeting of the Inter-State Milk Producers' Association is the member's own meeting.

Attend this meeting personally if possible or see to it that your local delegate carries your official proxy and can represent you at the meeting. Printed proxy blanks may be found on page 3 of this issue of the Milk Producers' Review.

Proxies need only be signed by the member and witnessed. Other information required, number of shares, etc., can be supplied by the home office. No revenue stamp need be affixed to proxy.

**Annual Banquet, November 22nd  
Promptly at 6:00 P. M.  
REGISTER EARLY FOR SEAT ALLOTMENT**

### I. M. P. A. Questionnaire

Doubtless most of our members appreciate, in a general way, the purpose and scope of the work of the Inter-State Milk Producers' Assn. and its allied organization, the Philadelphia Inter-State Dairy Council. However, many do not have the definite facts in their minds with respect to the organization, development and detailed activities of these two organizations.

To bring this information directly to every member and every prospective member as well as a definite program in the shape of a questionnaire has been prepared.

This questionnaire is now presented in this issue of the Milk Producers' Review. It should prove of interest to every reader of the paper. It will refresh the mind of the older members and bring to the newer one a full outline of the Association's policies and program.

We commend this article to your careful and earnest study. (See page 2.)

### Report of the Field and Test Department Inter-State Milk Producers' Association.

The following statistics show the aggregate operations of all the Inter-State Milk Producers' Association field men in connection with testing, weighing and general membership work, for the month of September, 1928.

No. Tests Made ..... 6064  
No. Plants Investigated... 49  
No. Membership Calls... 307  
No. New Members  
Signed ..... 92  
No. Cows Signed ..... 516  
No. Transfers Made .... 18  
No. Meetings Attended .. 9  
No. Attending Meetings.. 440

## LATEST MARKET PRICES

**PHILADELPHIA SELLING PLAN**  
The basic price quoted below for October, 1928, is to be paid by cooperating dealers on the average basic quantity established by each producer. For all milk bought in excess of the basic amount, the surplus prices, quoted below for the month of October are to be paid. Under the Philadelphia Selling Plan, all milk in excess of the established Basic Quantity, will, until further advised, be paid for by cooperating dealers at the Class I Surplus Price, that is on the basis of the average price of 92 score solid packed butter, New York City, plus 20 per cent. This plan not in effect during November and December 1928.  
The following quotations are based on 3 percent butterfat content milk and a differential of 4 cents for each tenth point and 2 cents for each half tenth point up or down, and are for all railroad points. (Inland stations carry differentials subject to local arrangements).

**INTER-STATE MILK PRODUCERS' ASSOCIATION PRICES**  
This price list is issued with the understanding that it is not to be used by producers and that all buyers using it as a basis of payment to producers, shall in addition thereto make the following contributions and payments:

(1) To the Philadelphia Inter-State Dairy Council 2c per 100 pounds (46½ quarts) of all milk purchased from any producer at prices listed hereon.  
(2) To the Inter-State Milk Producers' Association 2c per 100 pounds (46½ quarts) of all milk bought from members of said Association.  
(3) To the Philadelphia Inter-State Dairy Council 2c per 100 pounds (46½ quarts) of all milk bought from other producers at prices listed hereon.  
The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed, for improvements and stabilization of markets and for an educational campaign advertising the food value of dairy products.

BASIC PRICE		BASIC PRICE	
October		October	
F. O. B. Philadelphia	Grade B Market Milk	Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.	
Per 100 lbs.	Per Qt.	Prices are less freight and receiving station charges.	
3.29	7.1	1 to 10 incl.	2.68
3.31	7.15	11 to 20 "	2.77
3.33	7.2	21 to 30 "	2.83
3.35	7.25	31 to 40 "	2.87
3.37	7.3	41 to 50 "	2.93
3.39	7.35	51 to 60 "	2.97
3.41	7.4	61 to 70 "	3.03
3.43	7.45	71 to 80 "	3.07
3.45	7.5	81 to 90 "	3.13
3.47	7.55	91 to 100 "	3.17
3.49	7.6	101 to 110 "	3.23
3.51	7.65	111 to 120 "	3.27
3.53	7.7	121 to 130 "	3.33
3.55	7.75	131 to 140 "	3.37
3.57	7.8	141 to 150 "	3.43
3.59	7.85	151 to 160 "	3.47
3.61	7.9	161 to 170 "	3.53
3.63	7.95	171 to 180 "	3.57
3.65	8	181 to 190 "	3.63
3.67	8.05	191 to 200 "	3.67
3.69	8.1	201 to 210 "	3.73
3.71	8.15	211 to 220 "	3.77
3.73	8.2	221 to 230 "	3.83
3.75	8.25	231 to 240 "	3.87
3.77	8.3	241 to 250 "	3.93
3.79	8.35	251 to 260 "	3.97
3.81	8.4	261 to 270 "	4.03
3.83	8.45	271 to 280 "	4.07
3.85	8.5	281 to 290 "	4.13
3.87	8.55	291 to 300 "	4.17
3.89	8.6		4.23
3.91	8.65		4.27
3.93	8.7		4.33
3.95	8.75		4.37
3.97	8.8		4.43
3.99	8.85		4.47
4.01	8.9		4.53
4.03	8.95		4.57
4.05	9		4.63
4.07	9.05		4.67
4.09	9.1		4.73
4.11	9.15		4.77
4.13	9.2		4.83
4.15	9.25		4.87
4.17	9.3		4.93
4.19	9.35		4.97
4.21	9.4		5.03
4.23	9.45		5.07
4.25	9.5		5.13
4.27	9.55		5.17
4.29	9.6		5.23
4.31	9.65		5.27
4.33	9.7		5.33
4.35	9.75		5.37
4.37	9.8		5.43
4.39	9.85		5.47
4.41	9.9		5.53
4.43	9.95		5.57
4.45	10		5.63
4.47	10.05		5.67
4.49	10.1		5.73
4.51	10.15		5.77
4.53	10.2		5.83
4.55	10.25		5.87
4.57	10.3		5.93
4.59	10.35		5.97
4.61	10.4		6.03
4.63	10.45		6.07
4.65	10.5		6.13
4.67	10.55		6.17
4.69	10.6		6.23
4.71	10.65		6.27
4.73	10.7		6.33
4.75	10.75		6.37
4.77	10.8		6.43
4.79	10.85		6.47
4.81	10.9		6.53
4.83	10.95		6.57
4.85	11		6.63
4.87	11.05		6.67
4.89	11.1		6.73
4.91	11.15		6.77
4.93	11.2		6.83
4.95	11.25		6.87
4.97	11.3		6.93
4.99	11.35		6.97
5.01	11.4		7.03
5.03	11.45		7.07
5.05	11.5		7.13
5.07	11.55		7.17
5.09	11.6		7.23
5.11	11.65		7.27
5.13	11.7		7.33
5.15	11.75		7.37
5.17	11.8		7.43
5.19	11.85		7.47
5.21	11.9		7.53
5.23	11.95		7.57
5.25	12		7.63
5.27	12.05		7.67
5.29	12.1		7.73
5.31	12.15		7.77
5.33	12.2		7.83
5.35	12.25		7.87
5.37	12.3		7.93
5.39	12.35		7.97
5.41	12.4		8.03
5.43	12.45		8.07
5.45	12.5		8.13
5.47	12.55		8.17
5.49	12.6		8.23
5.51	12.65		8.27
5.53	12.7		8.33
5.55	12.75		8.37
5.57	12.8		8.43
5.59	12.85		8.47
5.61	12.9		8.53
5.63	12.95		8.57
5.65	13		8.63
5.67	13.05		8.67
5.69	13.1		8.73
5.71	13.15		8.77
5.73	13.2		8.83
5.75	13.25		8.87
5.77	13.3		8.93
5.79	13.35		8.97
5.81	13.4		9.03
5.83	13.45		9.07
5.85	13.5		9.13
5.87	13.55		9.17
5.89	13.6		9.23
5.91	13.65		9.27
5.93	13.7		9.33
5.95	13.75		9.37
5.97	13.8		9.43
5.99	13.85		9.47
6.01	13.9		9.53
6.03	13.95		9.57
6.05	14		9.63
6.07	14.05		9.67
6.09	14.1		9.73
6.11	14.15		9.77
6.13	14.2		9.83
6.15	14.25		9.87
6.17	14.3		9.93
6.19	14.35		9.97
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6.51	15.15		10.77
6.53	15.2		10.83
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6.71	15.65		11.27
6.73	15.7		11.33
6.75	15.75		11.37
6.77	15.8		11.43
6.79	15.85		11.47
6.81	15.9		11.53
6.83	15.95		11.57
6.85	16		11.63
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6.93	16.2		11.83
6.95	16.25		11.87
6.97	16.3		11.93
6.99	16.35		11.97
7.01	16.4		12.03
7.03	16.45		12.07
7.05	16.5		12.13
7.07	16.55		12.17
7.09	16.6		12.23
7.11	16.65		12.27
7.13	16.7		12.33
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7.31	17.15		12.77
7.33	17.2		12.83
7.35	17.25		12.87
7.37	17.3		12.93
7.39	17.35		12.97
7.41	17.4		13.03
7.43	17.45		



# A Story of the Inter-State Milk Producers' Association IN QUESTIONS AND ANSWERS

(Continued from page 2)

## Ans. 1. COLLECTIVE BARGAINING WITH MILK BUYERS:

Under the old disorganized method, producers of milk were at a disadvantage in selling. Buyers dealt with each individual separately, often paying a wide variety of prices according to local competitive need. The price paid was generally not announced in advance. Producers having little knowledge of supply and demand were weak under this system and buyers were strong. Upon signing a membership contract with the Inter-State Milk Producers' Association, producers agree to let the Association act as selling agent, thus one sales manager has authority to speak for the entire membership, eliminating competition of producers with each other for price. Producers know in advance what price they will receive and are in position to make their production plans intelligently.

Under this plan bargaining power of producers is balanced with bargaining power of buyers.

## 2. GATHERING OF MARKET INFORMATION AND STATISTICS.

The territory from which Philadelphia receives its supply of milk is so large that one section may, on account of advantageous weather conditions, have a larger supply of milk than usual, while at the same time another part may be short of milk. To successfully bargain for price it is necessary to know:

- Factors affecting entire local supply and demand.
- Factors affecting supply and demand of nearby large markets.
- Factors affecting supply and demand of world's markets.
- Cold storage holdings of butter, cheese, condensed and powdered milk.
- Consumer demands and buying power.

## 3. STABILIZATION OF SUPPLY (PHILA. SELLING PLAN).

Consumer demands require approximately the same quantity of milk each day in the year. Under nature's plan, previous to the adoption of the Philadelphia Selling Plan (also called the Basic and Surplus Plan), too much milk was produced in the spring months of abundant pastures and too little to supply the demand in the fall months.

The Philadelphia Selling Plan has brought about a more uniform supply throughout the year and from one year to another. The idea behind the Philadelphia Selling Plan has been to pay the producers a price based on the marketing value of such portions of their milk as is needed for the regular fluid milk demands of the market and a lower price based on the price of butter for that portion of their milk which is produced in addition to the regular demands of the market.

## 4. EDUCATIONAL INFORMATION TO ENTIRE MEMBERSHIP REGARDING PRODUCTION, QUALITY, MARKET TRENDS, ECONOMIC AND LEGISLATIVE NEEDS.

Problems of membership affecting one part of our territory, directly or indirectly, affect all other parts. One of the most valuable services performed by the organization of producers is the educational information obtained and made available for the entire membership.

## 5. DISSEMINATION OF MARKET INFORMATION THROUGH PUBLICATION OF THE INTER-STATE MILK PRODUCERS' REVIEW.

The Inter-State Milk Producers' Review is the Association's own paper, published monthly, giving full market information to all members.

## 6. CHECK TESTING SERVICE.

Practically all milk is sold by weight and paid for according to the percentage of butterfat content. A group of men are regularly employed to check upon accuracy of buyer's weigh scales and butterfat tests.

The check testing service of the Inter-State Milk Producers' Association was inaugurated on its present scale in 1923. There are at this time 161 cooperating milk plants in the territory supplying milk to Philadelphia. They are located in four different States—Pennsylvania, New Jersey, Maryland and Delaware.

At least eight investigations each year are made at all cooperating plants and as many additional ones as may be necessary. Approximately 7000 tests are made each month. Members are notified by post card as to the butter fat percentage found in their milk.

The payment for practically all milk sold in the Philadelphia territory is based on the test of composite samples taken by the distributors. Our test is an additional one to insure accuracy, and our service is designed also to insure proper methods of sampling, care of samples, accurate operation of weigh scales, etc.

Nine men are engaged in this work. Each man is assigned to a certain territory. We have reduced the percentage of actual mistakes in testing from about ten percent to less than one percent, but undoubtedly the greatest benefit to our members is derived by the fact that Babcock Testing Operators know they are being constantly watched and that any carelessness or neglect on their part will result in an adjustment.

## 7. ASCERTAINING RESPONSIBILITY AND SOLVENCY OF BUYERS.

When the Inter-State Milk Producers' Association was first formed, one of the chief activities was to try to collect bad bills from irresponsible milk buyers. Today that is almost a thing of the past. At that time there were said to be over 700 milk buyers in Philadelphia. Now, there are less than 50. Many small buyers have consolidated and the inefficient ones have been unable to meet competition and have sold out to those more progressive.

## 8. COOPERATION WITH OTHER MILK PRODUCERS' ASSOCIATIONS.

The Inter-State Milk Producers' Association belongs to and helps support a national organization known as the National Cooperative Milk Producers' Federation, which has a membership of forty-five milk producers' associations, reaching from coast to coast.

Many laws and rulings, both Federal and State, favorable to the dairy industry, have been secured through the combined efforts of those cooperating groups. Some of the most important include:

### Federal Laws

The Copper-Volstead Act which gave the farmers of the United States the right to organize.

The Lenroot-Tabor Act which regulates the importation of dairy products from Canada.

The Voight Act which prohibited the movement of "filled" milk in Interstate traffic. (Filled milk is milk from which the butter fat has been removed and coconut oil incorporated.) Tariff rulings which put as much protection on dairy products as on other commodities. (Hearings before the Tariff Commission have resulted in adjustments of rates for more adequate protection against importations of milk and cream from Canada, butter from Denmark and the Netherlands, and casein from Argentine.)

### State Laws

Pennsylvania, at this time, has the best Oleomargarine Law of any state in the union and all the states in which we operate have adequate laws prohibiting the manufacture and sale of filled milk.

As a direct result of the work of the Inter-State Milk Producers' Association in cooperation with other associations and dairy interests, efficient laws have been passed in the states in which we operate, governing the operation of the Babcock Test. Accuracy of milk-weighers, milk samplers and Babcock Test operators, is now insured by requiring all such operators to obtain licenses which can only be had by passing a rigid examination.

## 9. A STORY OF THE INTER-STATE MILK PRODUCERS' ASSOCIATION WOULD NOT BE COMPLETE WITHOUT A FEW QUESTIONS AND ANSWERS EXPLAINING THE AFFILIATED ORGANIZATION THE PHILADELPHIA INTER-STATE DAIRY COUNCIL.

Ques. What is the Dairy Council?

Ans. The Dairy Council is a health education organization of the Dairy Industry which is formed for the purpose of disseminating information as to the importance of pure, safe milk in the diet.

Ques. When was Philadelphia Inter-State Dairy Council organized?

Ans. In 1921.

Ques. What territory comprises the Philadelphia district, and how is it subdivided?

Ans. The Philadelphia Milk Shed—Johnstown, Altoona, Philadelphia and vicinity, Trenton, New Jersey, Sea Shore cities, Wilmington, Reading, Hagerstown, etc.

Ques. What do you consider the fundamental objective of the Dairy Council?

Ans. To secure the proper consumption of dairy products which is commensurate with 100 per cent health.

Ques. Explain the relationship between the Philadelphia Inter-State Dairy Council and the National Dairy Council.

Ans. Philadelphia Council is a regional unit affiliated with the National Dairy Council.

Ques. Name the other regional Councils in the United States.

Ans. New England, Connecticut, Philadelphia, Baltimore, Washington, D. C., Pittsburgh, Cincinnati, Detroit, Birmingham, (Ala.), Iowa, California.

Ques. What is the form of organization of the Philadelphia Inter-State Dairy Council?

Ans. The Dairy Council is a non-stock corporation; during 1928 it was incorporated in the State of Pennsylvania.

Ques. How is it financed?

Ans. It is financed by the dairy industry through contributions from producers of milk and buyers of milk.

Ques. What are the departments of the Philadelphia Inter-State Dairy Council?

Ans. Nutrition, Health Dramatics, Quality Control, Publicity.

Ques. What does each do?

Ans. Nutrition—Teaches proper food selection and preparation of milk dishes. Health Dramatics—Aid schools and adult groups in dramatizing health and proper nutrition. Quality Control—Aids in improving quality of product through establishment of sanitary standards for production and handling. Publicity—Prepares and distributes material; such as motion pictures, newspaper articles, etc.

Ques. What relationship, if any, exists between the Philadelphia Inter-State Dairy Council and the Inter-State Milk Producers' Association?

Ans. No direct relationship, but representatives of the Inter-State Milk Producers' Association comprise one half of the Board of the Dairy Council.

Ques. Who are the contributors to the Dairy Council, and how can anyone become an active contributor?

Ans. Producers and buyers of milk in the territory are eligible to active membership provided they are willing to cooperate with the Dairy Council, and have a milk supply that meets with the approval of the Dairy Council.

Ques. How is the Philadelphia Inter-State Dairy Council managed?

Ans. By a board of 16 directors, one-half of whom are nominated by the Inter-State Milk Producers, and one-half by the cooperating distributors.

Ques. How is the public represented in the Philadelphia Inter-State Dairy Council?

Ans. By an advisory Commission of honorary members who are consulted as to educational policies and methods.

Ques. What understanding has the Dairy Council with Boards of Education in the cities of the district?

Ans. The connection of the Dairy Council with the Boards of Education varies in different cities. It depends entirely on the curriculum of the school, but in any case the Dairy Council is a volunteer organization offering intensive and inspirational health education.

Ques. How is literature, posters, films, etc., prepared? Who prepares literature, films, etc.?

Ans. Different councils prepare the literature, films, etc. They are submitted to a committee at the National Dairy Council Conference which recommends where and for what purpose each can best be used. Material is then distributed through the National Dairy Council and regional dairy council offices as required.

# Market Conditions No Surplus November and December

H. D. ALLEBACH

From a careful survey of the market situation it was evident on November 1st, that production in the Inter-State territory was not keeping pace with the demand. Both the total production for the territory and production per farm seemed to be slightly below that of last year. Apparently many farmers, for some reason, were either not feeding as heavily as a year ago or had not adjusted their breeding program as carefully as heretofore. In view of the above facts as brought out by the survey, a conference was called, and cooperating buyers in the district agreed at a meeting held in this office on November 6th, 1928, to pay basic price on all milk purchased on the Association plan during November and December, 1928.

It was the distinct understanding at the conference that the selling plan for establishing basic quantities for 1929 will remain in force as outlined in the July, 1928 issue of the Milk Producers' Review. Since during November and December of this year all milk will be paid for at basic price, farmers can increase their production, to a certain extent by a program which will include, among other things, increased feeding. Any increase in production resulting therefrom will be paid for at full basic price and will enter into the calculations in establishing an increased basic quantity for 1929. We trust that our members have been following out the suggestions which I have made, not to reduce production during this autumn and early winter. We are hoping that everyone will hold at least his present basic amount.

## General Market Conditions

While the price of butter during October has been about as good as one year ago, and stock in storage has not been quite as high, a slightly increased production has had a tendency to weaken the attitude in the market. Evidently an increase in production of butter has been going into consumption, taking the place of butter which otherwise would have come out of storage.

Weather conditions during the month have been favorable for both milk production and consumption. Farmers throughout the territory have had unusual difficulty and expense in harvesting their corn crop. Perhaps some have, to a certain extent, neglected their dairies and may take better care of them when the stabling season begins in earnest.

Our statistical reports show that during September the Inter-State Milk Producers' Association handled 44,308,174 pounds of milk. The average weighted price of four per cent. milk f. o. b. Philadelphia for the month was \$3.584 per hundred pounds.

Both from the number of meetings of our local units which have been held during the past few months and from the interest shown at all of these meetings, it is very apparent that there is a far greater interest in the affairs of the Association on the part of its members generally.

We trust that this will be reflected in a full attendance of delegates and members at our coming Annual Meeting.

## October Milk Prices

Grade B market milk, three per cent butter fat content (basic quantity average), delivered f. o. b. Philadelphia, during October is quoted at \$3.29 per hundred pounds.

The price of basic milk (basic quantity average) three per cent butterfat content, delivered at Receiving Stations in the 51-60 mile zone, during October, is quoted at \$2.71 per hundred pounds. The usual butterfat differentials and freight rate variations applying at other mileage points in the territory, are shown by quotations on page 5, of this issue of the Milk Producers' Review.

The price of Class I surplus milk, for October, three per cent butterfat content, at all Receiving Stations, is \$1.86 per hundred pounds. For f. o. b. Philadelphia delivery the price for Class I surplus milk is quoted at \$2.43 per hundred pounds or 5.2 cents per quart.

Under the Philadelphia Selling Plan, Class II milk is eliminated during the last half of the year. All milk will, until further notice, except during November and December, be sold under the classifications of basic and Class I surplus.

## October Butter Market

The butter market opened the month in a fairly stable manner. There was, however, a tendency toward caution on the part of buyers. Confidence in the market was lacking and buying was largely of the hand to mouth order. There has been more or less irregularity to prices but the fluctuations have been mostly small. There have been no sharp reactions either up or down.

Nevertheless there has been a tendency toward nervousness, almost throughout the month, even in the face of small price advances. Consumptive demand, on the whole, was reported generally good.

During the last half of the month the market had a somewhat better appearance, but nervousness was still in evidence. Statistical reports available in mid month showed creamery butter storage stocks at 128,193,000 pounds on October 1st, 1928, as compared with 147,396,000 pounds on October 1st, 1927 and a five year average of 127,904,000 pounds. This situation was deemed favorable, particularly in view of the fact that storage holdings appeared to have been slower as the month advanced.

Imports of butter have been light, in that there has been little variation in the parity of prices at home and abroad.

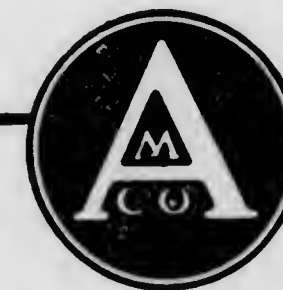
Prices for 92 score solid packed butter New York City opened the month at 47 1/2 cents, there was a slight advance during a few days but at mid month quotations were at 47 1/2. There was a gradual decline to 47 cents followed by an upturn which reached 49 cents at the close of the month.

The average price of 92 score butter, solid packed, New York City, on which the October surplus price was computed was 47.66 cents a pound as compared to 48.41 cents a pound in September and 45.82 cents a pound one year ago.

# TWO YEARS' RECORDS ON AN AMCO-FED HERD

The figures below are from the Rhode Island Herd Test Association books on the herd of V. J. De Rocha, Bristol, R. I.

Average Per Cow	1926-27	1927-28
Milk	12,201 lbs.	13,104.0 lbs.
Butter Fat	396 "	422.1 "
Cost of roughage including pasture	\$ 72.09	\$ 66.05
Grain Cost	\$ 89.48	\$112.13
Total Feed Cost	\$161.57	\$178.18
Value of Product above feed cost	\$371.13	\$398.62
AVERAGE INCREASE		
903 LBS. MILK		26.1 LBS. BUTTER FAT



THERE are two outstanding facts in this two-year record on Amco feed—the high average production per cow; and the increased milk and butter fat production in the second year. There were 19 cows in the milking herd 1926-1927, and 17 cows 1927-1928, for eight months or more.

Mr. De Rocha is working on a sound herd improvement program and making good profits at the same time. He feeds AMCO 12% FITTING RATION to dry cows and heifers; AMCO 20% DAIRY (flexible formula feed) to his milking cows; and AMCO JUNE PASTURE is used as an appetizer and tonic for the whole herd.

Amco Fitting Ration provides the right amount of protein and the minerals to bring his young and dry stock into production, ready to milk to capacity. Amco 20% Dairy (because its formula is flexible) gives the milkers the maximum amount of digestible feed per dollar invested; and Amco June Pasture makes for herd improvement, and more milk as well.

Mr. De Rocha has fed Amco open formula feeds for three years.

DIVISION OFFICE: MUNCY, PA.

# AMCO

## FEED MIXING SERVICE

AMERICAN MILLING COMPANY, PEORIA, ILLINOIS

Plants at: PEORIA, ILL., OMAHA, NEB., OWENSBORO, KY.  
Alfalfa Plants at: POWELL, GARLAND, and WORLAND, WYO.

When answering advertisements always mention  
that you saw the "ad" in the Milk  
Producers' Review



## 2 reasons for unprofitable cows

If a cow doesn't produce milk in profitable quantities you can blame it on one of two things, or on both. The first is that the cow does not have the capacity to consume enough feed to produce milk profitably. The other is the ration—out of balance and unsuited to milk production.

The right feed will correct the second situation by putting the cow in good health and keeping her so. UNION GRAINS will bring cows back to profitable production. It smooths the coat, brightens the eyes, increases the activities of the mucous membranes, corrects digestive troubles and puts the cow in prime condition for heavy work.

Buy the type of UNION GRAINS that best fits your feeding program. If you have timothy hay, corn stover and silage and are feeding home-grown corn or oats, buy 32% UNION GRAINS to mix with your corn or oats. You'll be surprised to see how your cows will milk and how economical this ration will prove.

If you are feeding mixed hay and silage, 24% DRY UNION GRAINS or



24% Sweet UNION GRAINS will balance your total ration so that your cows will snap into their work in a way that will amaze you.

If you have lots of alfalfa, clover, pea vine or soy bean hay, 20% Sweet UNION GRAINS will not only make a perfectly balanced ration, but will make a cheaper one as well.

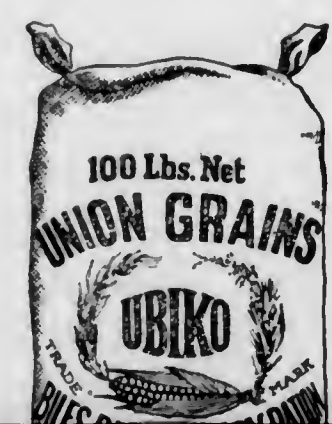
Perhaps you have some dry cows or yearling heifers to winter. 16% Sweet UNION GRAINS will keep them in good condition and get the heifers ready for calving.

But whatever your needs—whatever your roughage, there is a type of UNION GRAINS to give you a perfectly balanced ration.

Write for UNION GRAINS Booklet.

If you will write for it, we will send you our booklet describing the five types of UNION GRAINS with feeding recommendations. Address

THE UBIKO MILLING COMPANY, Dept. L-23, Cincinnati, Ohio



Makers of UBIKO World Record Feeds

UBIKO All-Mash System  
Starting and Growing Ration  
Complete Laying Ration  
UBIKO World Record Egg Mash  
UBIKO Fattening Mash  
UBIKO Scratch Feed  
UBIKO Pig and Hog Ration  
UBIKO Horse Feeds  
Union Grains Dairy Rations  
And other UBIKO World Record Feeds

### UNION GRAINS

THE FIRST DAIRY FEED MADE

24% Dry, 16%, 20%, 24%, 32% Sweet

National Dairy Exposition Held in Memphis, Tenn.

(Continued from page 1)

can Cheese Class went to John Schultz, Pine Island, Minn., with a score of 96.75; Paul E. Ott, Wausau, Wisconsin won the silver medal and Edw. Finkelmier, Mishicot, Wisconsin won the bronze medal. In the Swiss Cheese class the gold medal went to Eugene Wirz, Darlington, Wis.

Dairy Cattle Awards

Entries for prizes in the dairy cattle show exceeded greatly the number of animals that were shown at the exhibit in Memphis last year.

Jerseys set a new record with a total of 335 head; Holstein-Friesians were next with 231; Guernseys had 167 on show; Brown Swiss totaled 123 and Ayrshires 90. In addition to this there was more than 200 head of Club calves.

The cattle on show, were mostly of exceedingly good character and represented the finest types of the dairy breeds.

The Grand Champions in the various Breeds ranked as follows:

**Jersey**  
Cow—Imported Matilda's Belle—Taft Ranch Jersey Farms, Taft, Tex.  
Bull—Forms Rochetto Noble—P. H. B. Frothinguysen, Morristown, N. J.  
**Guernsey**  
Cow—Imp. Gem's Pride of the Gron, Emmadino Farm, J. C. Penny, Hopewell Junction, N. Y.  
Bull—Border King of Roberts, Glenn Cliff Farm, Independence, Kansas.  
**Holstein**  
Cow—Caroline Netherland Lady, J. D. McDonald, West Salem, Wis.  
Bull—Sir Robes Ormsby Hengervold, Elmwood Farm, Deerfield, Ill.  
**Ayrshire**  
Cow—Cacapon Lass, Topeka, Kansas.  
Bull—Alta Crest Ringleader, Alta Crest Farms, Spencer, Mass.  
**Brown Swiss**  
Cow—Silver Bell, J. C. Zoller, Schneetady, N. Y.  
Bull—Maiden's Veronica's College Boy, J. C. Zoller.

### Make Plans for Penna. State Farm Show

Plans are now being made by the State Farm Products Show Commission for holding the thirteenth annual Pennsylvania Products Show in Harrisburg, January 22, 23, 24 and 25, 1929.

A premium list showing the distribution of approximately \$10,000 in cash prizes in addition to many special prizes has been prepared and will soon be available. This booklet will reveal several new departments including an exhibit of vegetables and a home economics display.

In order to take care of the new features as well as the growing interest among farmers in the show generally, it is anticipated that more floor space will be required this year than ever before. A total of 120,000 square feet of space was used a year ago, and still the show rooms were far too small to take care of the record breaking crowds.

### Report of the Quality Control Department Philadelphia Inter-State Dairy Council.

The following is a report of the work done by the Quality Control Department of the Dairy Council, for the month of September, 1928.

No. Inspections Made... 2564  
Sediment Tests ..... 977  
No. Permanent Permits Issued ..... 154  
No. Temporary Permits Issued ..... 43  
No. Meetings Held .... 4  
Attendance ..... 677  
Bacteria Tests Made (Plants) ..... 17  
No. Miles Traveled .... 19054  
During the month 26 dairies were discontinued from selling for failure to comply with the regulations—8 dairies were reinstated before the month was up.  
To date 115,291 farm inspections have been made.

### State Agricultural Week Plans Made at Trenton

The fourteenth annual New Jersey Agricultural Week to be held in Trenton from January 15 to 18 will be of greater statewide interest than ever before, according to plans discussed at a meeting attended by the leading New Jersey agricultural interests. Representatives of fifteen farm organizations, the State Grange, College of Agriculture, Experiment Station and State Board of Agriculture, attended the conference which was called by William B. Duryee, secretary Department of Agriculture.

The week's program will include a larger Farm Products and Equipment Show, as well as the official State Agricultural Convention, at which two members of the State Board of Agriculture are elected, and the annual meetings of fifteen state agricultural organizations, making Trenton the mecca for every farmer in the state during the third week in January.

The farm products display will prove of even more universal interest than last year.

The farm equipment show will also be larger than ever and all types of machinery suited to New Jersey agriculture will be shown. The baby chick show, introduced last year which was the first of its kind in the country, will attract at least twenty-five exhibitors.

About thirty-five educational exhibits, of special interest to New Jersey farmers, will also be on display.

### Experiments Will Find Dairy Cows Mineral Needs

Salt is not the only mineral feed required for dairy cattle growth and milk production. To determine the greater needs of the hidden hunger, the dairy husbandry department of the Pennsylvania Agricultural Experiment Station at State College, Pa., is conducting a long-time mineral feeding investigation with Dr. S. I. Bechdel, research worker, in charge of the experiments. Five or more years will be required to solve the problems confronting the workers.

Forty grade Holstein animals are used in this study, which Dr. Bechdel declares is the most far-reaching and exhaustive one of its kind ever attempted by any experiment station. These animals are divided into four groups of 10 each. All run on pasture in season and receive grain, hay, and silage the remainder of the year. Two groups get alfalfa hay and the other two receive timothy hay. One timothy and one alfalfa group receive bone meal supplement throughout the year.

A study of the growth of the animals under the different treatments has been made, and milk production records will be taken this fall when the heifers freshen. The health of the individuals in the different groups also is an important phase of the study, and every animal has presented a clean bill of health to date.

The feedlot and health studies are in charge of Dr. Bechdel and Dr. J. F. Shigley, college veterinarian. In the second year of milk production the Institute of Animal Nutrition, directed by Dr. E. B. Forbes, will take up the mineral balance studies. At least two representative individuals of each group will be subjected to a calcium, or lime, balance study covering the whole cycle of gestation and milk giving.

### DIRECTORS of the INTER-STATE MILK PRODUCERS' ASSN.

Whose terms expire with the coming Annual Meeting of the Association, to be held in Philadelphia, Thursday, November 22nd, 1928.

A. B. WADSWORTH, Woodstown, Salem County, New Jersey.  
E. NELSON JAMES, Rising Sun, Cecil County, Maryland.  
H. I. LAUVER, Port Royal, Juniata County, Pennsylvania.  
E. R. PENNINGTON, Kennedyville, Kent County, Maryland.  
H. B. STEWART, Alexandria, Huntington County, Pennsylvania.  
S. U. TROUTMAN, Bedford, R. D., Bedford County, Pennsylvania.  
J. W. KEITH, Centerville, Queen Annes County, Maryland.  
C. C. TALLMAN, Columbus, Burlington County, New Jersey.

### Junior Marketing Specialist

The United States Civil Service Commission announces an open competitive examination for Junior Marketing Specialist, (Dairy Products). The examination is to fill vacancies in the Bureau of Agricultural Economics, for duty in Washington, D. C., or in the field.

The examination will be held not later than November 20th, 1928. For information communicate with the Civil Service Board, in Washington, D. C., or at the post office or custom house in any city.

### National Cooperative Milk Producers' Federation Holds Annual Meeting in Memphis, Tenn.

(Continued from page 1)

mon Sales Agencies for the Marketing of Dairy By-Products," while H. D. Allebach, president Inter-State Milk Producers' Association, and H. R. Leonard, manager of the Twin City, Milk Producers' Association, St. Paul, Minn., presented the problems involved and suggested plans for a National Cooperative Cream Marketing Agency.

Formal reports from the various committees were presented and adopted.



HARRY HARTKE, Covington, Ky. Vice President of the Cooperative Pure Milk Assn. of Cincinnati, elected President of the Federation

Charles W. Holman, secretary, presented his annual report as to the activities and scope of the Federation work for the past year.

F. P. Willis, treasurer of the Federation presented his annual report and formal record of certified auditors.

The Budget for 1929 was presented by H. D. Hull, chairman of the Budget Committee.

A formal resolution was presented at this time looking toward the increase of the Federation Dues, under which the scope of the work of the organization would be largely increased. This resolution was adopted subject to the approval of the individual member units comprising the Federation.

The following resolutions were unanimously adopted:

Resolution No. 1—This Federation urges the U. S. House of Representatives to take prompt and favorable action with respect to the George-Menges resolution regarding the vocational education bill, which has already been approved by the Senate.

Resolution No. 2—This Federation would urge that all educational campaigns to enlarge the dairy industry be founded on careful surveys of the production conditions and market opportunities.

Resolution No. 3—This Federation views with alarm the tendency of certain dairy interests that conduct advertising campaigns, urging the consumption of one or more dairy products and at the same time, by direct statement or by insinuation, endeavoring to hurt the sale of one or more other dairy products.

Resolution No. 4—We reaffirm the position taken by the Federation at its last annual meeting with respect to the tariff.

Resolution No. 5—This Federation wishes to express its appreciation of the action of Congress in adequately supporting the tuberculin testing work of the several states, and urges a continuation of the present program.

Resolution No. 6—We repeat the position taken by the Federation last year with respect to federal research:

"Appreciating the value to the dairy industry of the United States government market information with respect to the production of dairy products and their distribution in the larger markets of the country, the Federation urges:

"(a.) Extension of the service by the Bureau of Agricultural Economics, and particularly the extension of the information service with respect to movements of milk and cream into all metropolitan area receiving substantial quantities of carlot shipments of these products.

"(b.) The Federation further urges adequate appropriation to be made by the Congress to the Department of Agriculture for financing this additional service and also for adequately financing technical dairy research conducted by the Bureau of Dairy Industry.

"(c.) Believing that efficient distribution is an important factor in securing an adequate return for the dairy farmer, we recommend that the Bureau of Agricultural Economics in the United States Department of Agriculture, extend its research with respect to the milk industry so as to include an accurate analysis and a fair estimate of the cost of each step in the process of bringing the milk from the producer to the ultimate consumer."

Resolution No. 7—We desire to express our appreciation for the long con-



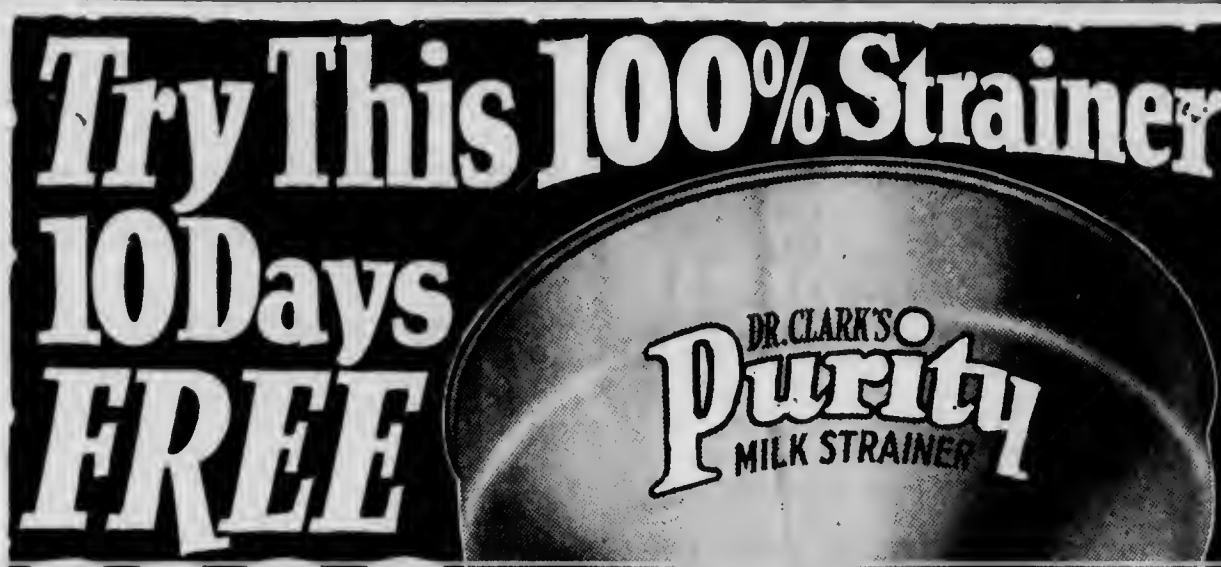
JOHN BRANDT, Minneapolis, Minn. Land O' Lakes Creameries, elected Vice President of the Federation

tinued, self sacrificing and able work that has been done over a number of years on behalf of our Federation by its President, John D. Miller. We feel that our words are entirely inadequate to express the obligation which this Federation and agriculture generally owes to him. And also we desire to express the warm personal feeling of love, friendship and high regard which we as individuals feel for him.

A special resolution reported by the Federation's Committee on Uniform Milk Ordinances was adopted, as follows:

"The Committee on Uniform Milk Ordinances has considered this very important subject, and recognizing the different climatic conditions and other factors governing the quality of milk and milk products, recommends that each member organization should do all in

(Continued on page 14)



### Make This 10 Day Test—FREE

We want every reader of "The Dairy Farmer" to make this 10 Day FREE Trial Test, just to prove that Dr. Clark's PURITY Strainer is far better and more sanitary, than any strainer on the market, and the only strainer that will strain your milk 100% clean in one straining.

We will ship you one of these improved and patented Strainers on FREE TRIAL—let you use it and test it for 10 Days alongside any other strainer you now have. Pour milk through your old strainer first. Then re-strain the same milk through the PURITY Strainer and see how much dirt and sediment Dr. Clark's removes which the other strainer does not get.

Use It for 10 Days FREE—At Our Risk

It's the patented construction of Dr. Clark's Strainer that makes it remove even the finest particles of dirt which no other strainer gets. It does away with the old-style, unsanitary straining cloths and fine mesh screens and in their place uses a sterilized cotton, wafer-like disc which can be instantly clamped to the bottom of the strainer. This PURITY Cotton Disc is more than a strainer. It filters the milk and removes every particle of dirt, dust and sediment. No messy, dirty straining cloths to wash. No fine mesh screens to get clogged with grease and dirt. These cotton Straining Discs cost only a fraction of a cent apiece and you simply use a clean, fresh one each time you milk and discard the used one after you are through straining. No other Strainer can equal it—no other can compare with it. No other is so easy to keep clean, odorless and sanitary. Send the coupon today and try Dr. Clark's PURITY Strainer on this 10 Day FREE TRIAL offer. Compare it with any other and see the difference.



Dr. Clark's Strainers are furnished in two sizes:  
10 quart size, Price \$3.00  
18 quart size, Price \$4.00  
The 10-quart size is for herds up to 10 cows. The 18-quart size is for herds of 10 cows or more. On this special FREE TRIAL Offer we also include a 10 days' supply of PURITY Cotton Straining Discs FREE of charge. Just fill out and mail the coupon below.

### Send No Money--Just Mail the Coupon

Just fill out the coupon below and tell us which size PURITY Strainer you want. Send no money. We will ship the whole outfit to you by prepaid parcel post. You use it and test it for 10 days on your own place. Then if you find it all we claim and want to keep it, you can send us a check for money order for it. If you don't find it the best, the cleanest straining and the most sanitary Strainer you ever used—just ship it back to us and the trial will cost you nothing. If you want 100% clean milk—if you want better grading for your milk, lower bacteria count and better prices for your milk or cream—don't pass this FREE TRIAL Offer by. Fill out and mail the coupon today. You don't risk a single penny.

**10 Day FREE TRIAL Coupon**

Gentlemen—I want to try Dr. Clark's PURITY Strainer on your 10 Day FREE Trial Offer. I will use it 10 days according to directions and at the end of that time if fully satisfied I will pay for it. If not, I will ship it back to you at the end of the trial period. You are to also include a 10 Days' supply of PURITY Cotton Straining Discs without charge.

Please ship me the \_\_\_\_\_ quart size Strainer.

Name \_\_\_\_\_ R. F. D. \_\_\_\_\_  
Town \_\_\_\_\_ State \_\_\_\_\_

### NEW Penna. Farm Bulletins

Recent bulletins published by the Pennsylvania Department of Agriculture include: Bulletin 463, Fertilizer Report, 1927; bulletin 464, What Shipping Point Inspection Is and What It Accomplishes; bulletin 465, Crop and Livestock Report, 1927; bulletin 466, Paint and Oil Report, 1921-1927; bulletin 467, Standard Grades for Farm Products. Copies of these bulletins may be obtained by communication with the Pennsylvania Department of Agriculture, Harrisburg, Pa.

### Sweet Clover Improves Soil

For the quick improvement of a very poor soil sweet clover is outstanding. It thrives well on such soil, provided it is limed and inoculated, makes a rank growth in a short time, and is an efficient producer of nitrogen and organic matter.

### Protect Farm Implements

Machinery left standing outdoors increases the farmer's expenses. One way to get practical farm relief is to carefully clean, store, and protect all implements when not in use.





### Harley, 100 Years Ahead of His Time

"It has been remarked by many authors of intelligence and observation, that in those communities where a liberal supply of genuine milk is obtained, fewer premature deaths have occurred; and that there is scarcely any article of food deservedly in more general use, particularly in Great Britain, than the pure and unadulterated milk of the cow."

This quotation might well be from a present-day writer on medical subjects. But the paragraph is from the introduction to "The Harleian Dairy System," a book printed in London 100 years ago.

Mr. Sam H. Green, the secretary-manager of California Dairy Council, had heard of this rare book, and on his recent trip to London made a search among the book stalls. Three copies were found, of which the Council is now the possessor.

William Harley, the author, amassed a fortune as the originator and distributor of turkey-red, checked gingham, a cloth that had great trading value in the American and British possessions.

Food values of milk aroused his interest, and he gave the mature years of his life to the study of dairying, established the Willowbank Dairy Farm near Glasgow, and sold market milk in that city and elsewhere.

First, he sought to correct trade abuses. It was the custom of vendors to adulterate the milk. Harley led an outcry against the practice. Of course, all milk was dipped, for it was long before the time of glass containers.

But there was no established standard measurement of milk, and both quantity and quality depended upon the whim of the seller. When Harley adopted the Scottish pint and stamped the measurement on the outside of his containers, he was hailed by the Lord Provost of Glasgow as a benefactor of the city.

This was half a century before anything was known about bacteria, but Harley required that every container on the dairy farm be boiled each time it was emptied.

To the present-day reader, the striking thing about this book is the vision which Harley had of the dairy industry, far ahead of his time. The housing which he adopted for his dairy cattle would almost pass public health inspection now.

This far-sighted old gingham manufacturer, turned dairyman, recognized three simple principles which are the bulwarks of the dairy industry's prestige today: (1) Milk is among the best of all foods for nourishing the human body; (2) Milk must be produced and distributed in accordance with the very highest standards of sanitation and quality; (3) There must be absolute honesty and fairness toward the public on the part of the dairyman.

The 4-H clubs in the United States have more than 600,000 boys and girls enrolled in them. All of these are carrying on definite projects in crop-growing and livestock-raising under the direction of demonstration agents.

### Rising Above the Average

"Dirt is a great leveler, but soap brings a clean head above the average level," Dr. Earle S. Green, Health Commissioner of Muncie, Indiana, said recently.

"Cleanliness is next to healthiness—get cleanliness next to you. Simple soap and water has contributed much to the betterment of mankind and also to the up-building of communities.

"No man can be self-respecting and dirty at the same time, except while in the shop. There is a psychological element to that. Body cleanliness causes cleanliness about the house, yards, alleys, streets and generally the entire city

is improved—solely by a bar of soap. And the satisfaction of satisfying the cleanliness about the house, yards, and alleys—solely by a bar of soap. And the satisfaction of satisfying the obligation to society, that of personal cleanliness, when demonstrated to youngsters, is a help in training them to hunt soap-suds.

"Even the mechanic, whose job for the world is apt to be a greasy one, is a believer in cleanliness and not only keeps his work bench and tools clean, but as soon as the evening whistle blows, goes to his locker for soap and a towel."

### Using First Aid After A Holiday Celebration

Some signs of holiday celebrations are not the kind we like to see—candle wax on the best table cloth, for instance, or a spatter of gravy on the new silk dress. After the wax hardens, much of it can be scraped off and what remains frequently will come out by putting a blotter over the spot and pressing it with a warm iron. Soap and water, of course, will remove gravy from washable materials, but sponging with hot water is the treatment for silks and wools. If a spot still remains, a grease solvent such as carbon tetrachloride, gasoline, or chloroform may be used. These should be applied with a clean cloth on the wrong side of the material; apply the solvent lightly. To keep the solvent from spreading and forming a ring, it may be mixed with French chalk, powdered magnesia, or white talcum powder to form a paste. Spread the mixture on the spot; allow it to dry, and then brush it off. A second application may be necessary. Colored materials are less likely to lose color when stains are removed if the cloth of the same color is used under the stain and also for applying the grease solvent.

Garments having large stains should be immersed in the cleaning fluid to prevent rings from forming.

### Kerosene for Cleaning

Kerosene is a "first-aid" to house cleaning, but, because it will burn, care must be used to keep it from fire.

A tablespoonful or so in the water for washing windows cuts grease easily and leaves the glass bright and clear. For cleaning porcelain and enameled iron, in bathrooms, bedrooms or kitchens, nothing is better than kerosene mixed with a little whiting or some fine commercial scouring powder. Here again kerosene cuts grease without marring the surface. A little kerosene in water helps the daily cleaning of tubs and bowls. No hard rubbing is necessary as this combination removes dirt and greasy stains almost like magic. The same mixture is good for washing painted woodwork. A cloth moistened with kerosene rubbed on the stove will keep the stove in good condition without the bad effect on pots and pans which stove polish has.

Dustless dusters also may be made by soaking clean cloths in a quart of water to which a tablespoonful of kerosene has been added and by letting them dry before they are used. Cloths so treated must be kept away from fire.

### Poster Contest

Make poster for the coming Chester County Farm Products Show, Dec. 5th to 8th, West Chester, Pa.

In addition to the other fine program arranged, there will be a poster contest covering two classes. (1) One in which all public school students in Chester County may participate. (2) One in which any one living in Chester County may participate.

All students, the one room rural to the high school, have an opportunity to win.

### Annual Gathering

of the Ladies of the Membership  
Attending the Twelfth  
Annual Meeting

—OF THE—

### INTER-STATE MILK PRODUCERS' ASS'N

A cordial invitation is extended to all women interested in the work of the Association and that of the Philadelphia Inter-State Dairy Council, to attend a meeting to be held at the offices of these organizations in the Flint Building, 219 N. Broad St., Philadelphia, on

**Thursday Morning, November 22nd, 1928**  
at 10.30 A. M.

Several members from different parts of the Association territory, will explain the use they make of Dairy Council material.

A play—"The Burglar in the House" will be presented by members of the Concordville Local.

LUNCHEON WILL BE SERVED

You will find this meeting of particular interest. Arrange to attend and bring your neighbor.

FREE TRANSPORTATION TO THE BENJAMIN FRANKLIN  
HOTEL AFTER MEETING

MRS. ROBERT F. BRINTON,  
Chairman Ladies' Hospitality Committee

### Cheerful Kitchens Make Contented Cooks

Among the new developments in present day decoration, color in the kitchen is outstanding. The kitchen no longer needs to be a dreary place which the housewife gladly escapes.

In the up-to-date kitchen the conventional and monotonous white is giving place to colors in paints and tiles. These are quite as sanitary and may be much pleasanter to look at.

Walls, curtains, floors, table covers, furniture, pots and pans and even handles of flat-ware may help to produce a cheerful setting for the business of preparing food. The kitchen may be one of the most attractive rooms in the house, one to be proudly exhibited to guests, and a room where the housewife finds her job pleasanter because of her surroundings.

The kitchen on the north side of the

house may be given a sunny atmosphere by the use of warm colors, particularly rich yellows. The walls may be painted in such shade and a linoleum may be chosen to harmonize with them. Many new patterns and shades in linoleum are on the market today. Oilcloth is also being made in bright plain colors. Inexpensive curtains of checked gingham in yellow or orange, bound with bias bands of the same material, suggest sunlight even on a cloudy day. The housewife may put in this new note of color by spending as much or as little time and money as she pleases. She may find an alluring display of colored kitchen equipment ready for her in the shops. She will also find, if she has the energy and inclination, that she can create a new kitchen with her own fingers and such helps as enamel paint and a good brush.

### From an Address by Verna Elsinger\* At the Annual Meeting of the National Cooperative Milk Producers' Federation

"Too often," Miss Elsinger said, "people have regarded a cooperative as simply a corporation to do business, with the members of the cooperative having no more personal interest in or relation to the organization than do the stockholders in a railroad or manufacturing or merchandizing group. This has resulted many times in the failure of the cooperative. As a matter of fact, the cooperative has obligations to its members beyond that of securing increased prices for their product or conducting a well managed business." She pointed out a number of factors which help to keep the membership of a cooperative in line with the organization, and to keep the management performing those services which are of greatest advantage to the members.

First of all, she stated that it is imperative that all the members know all about the achievements of the organization, the limitations of its activities, together with the important current market facts. The members should appreciate the principles underlying the organization of a cooperative and its essential purposes. One of the deepest needs of cooperative organization is that the members should feel that they have a sense of responsibility. A spirit of cooperation must pervade the group. There must be at all time a bond of friendship and of faith in each other, both between the management and the members and between the members themselves.

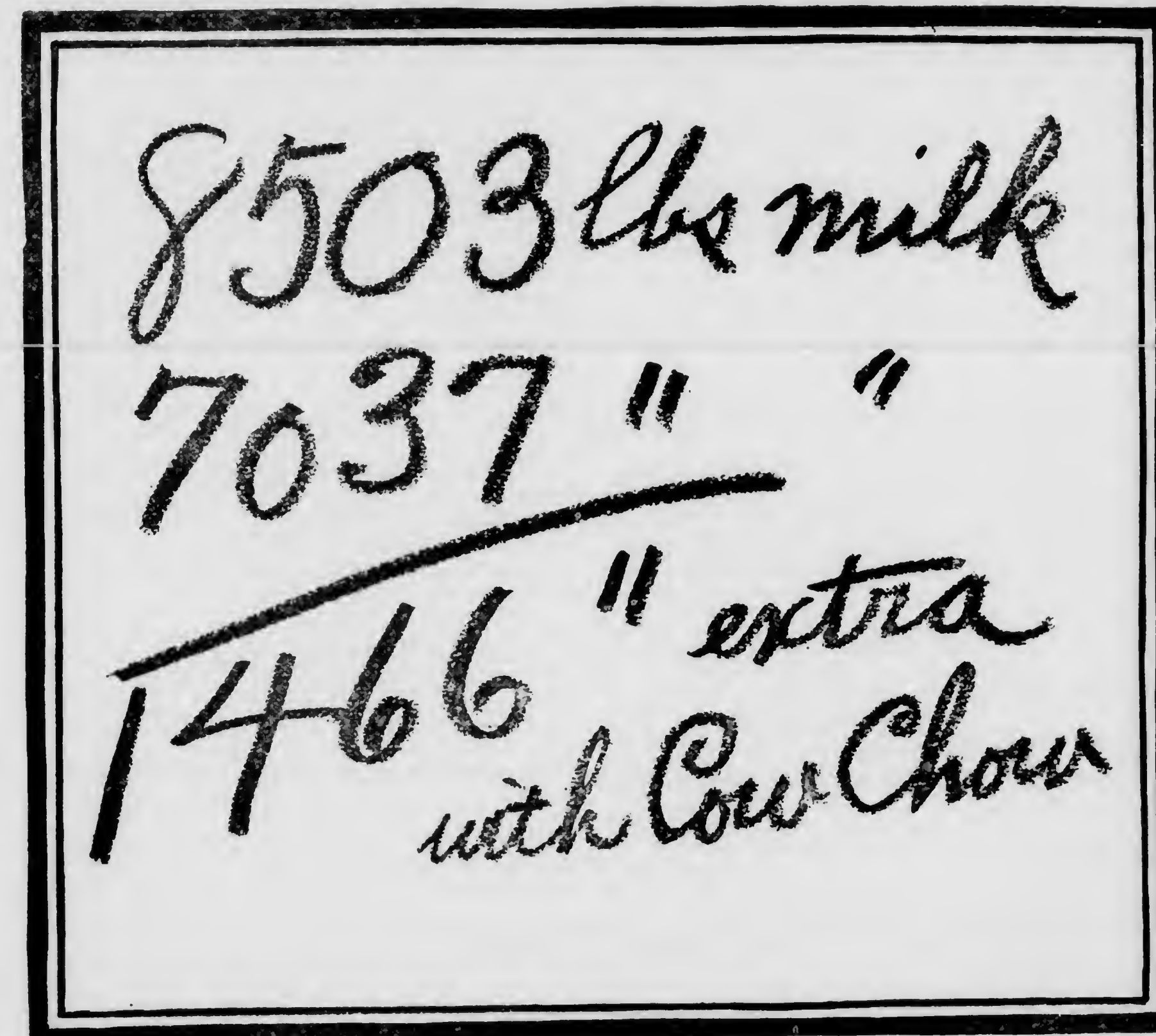
Everybody in the organization must learn to take the long term view and not be interested only in a temporary price advantage. When and where the cooperative association functions as it should, it becomes one of the strongest agencies of the up-building for a steady and progressive rural democracy.

Miss Elsinger referred to the fact that conditions in rural communities are entirely different than they were a few years ago. The coming of the automobile, telephone, radio and moving picture has entirely changed country conditions; and, country meetings, both of community and commodity organizations, must be very much worthwhile to attract the people to them and to compare in interest and value with other present day activities. She spoke of county-wide pageants which were being given in Kentucky and Ohio, dramatizing the importance of agriculture in the world today; also, of all day country schools in wintertime for neighborhood leaders where training could be given in such topics as parliamentary law, the work of a chairman and other officers of a local organization.

"The essentials of a good county meeting," said Miss Elsinger, "are:

- (1) An attractive room with good lighting facilities, good ventilation, and comfortable seats.
  - (2) A well balanced program, both serious and frivolous.
  - (3) Local activity in the program, each one being given something to do.
- In conclusion, she pointed out the opportunities for our country people in the future to have their organizations and educational agencies work together with a common purpose to aid the further development of our rural people, in line with its traditions of the past and economic needs of the present, and spiritual as well as material ideals for the future.

\*Miss Verna Elsinger is the Director, Home and Educational Department, Ohio Farm Bureau Federation, Columbus, Ohio.

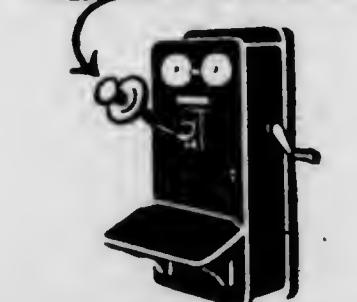


17 COWS in the Account, Va., are biggest during the last few months' milking. Herd Improvement Association averaged 7037 lbs. of milk. With average feed this is good production and puts profit into the bank.

The next year they were fed Purina, and averaged 8503 lbs.—\$25.00 to \$40.00 more profit per cow at a very small additional feed cost.

Cow Chow pays best through the whole lactation period, but the extra profit dollars

TAKE MY ORDER  
FOR ENOUGH  
COW CHOW TO  
HOLD UP MY  
PRODUCTION  
ALL YEAR



Start now to get those biggest extra profit dollars. Talk to the checkerboard feed dealer about your Cow Chow needs.

PURINA MILLS  
854 Gratiot Street, St. Louis, Mo.  
*Sold in checkerboard stores in the United States and Canada*  
Write us for a Purina Cow Booklet—free

**PURINA COW CHOWS**  
Cows - calves  
hogs - steers  
sheep - horses  
poultry

**Philadelphia Inter-State Dairy Council**  
The various departments are at your service and will assist you in planning  
**EDUCATIONAL ENTERTAINMENT**

for your Community, Local or Club Meetings. Lectures, Speakers, Motion Pictures, Lantern Slides, Etc.

Write us for detailed information and program.

R. W. BALDERSTON, Sec'y, 219 North Broad Street, PHILADELPHIA

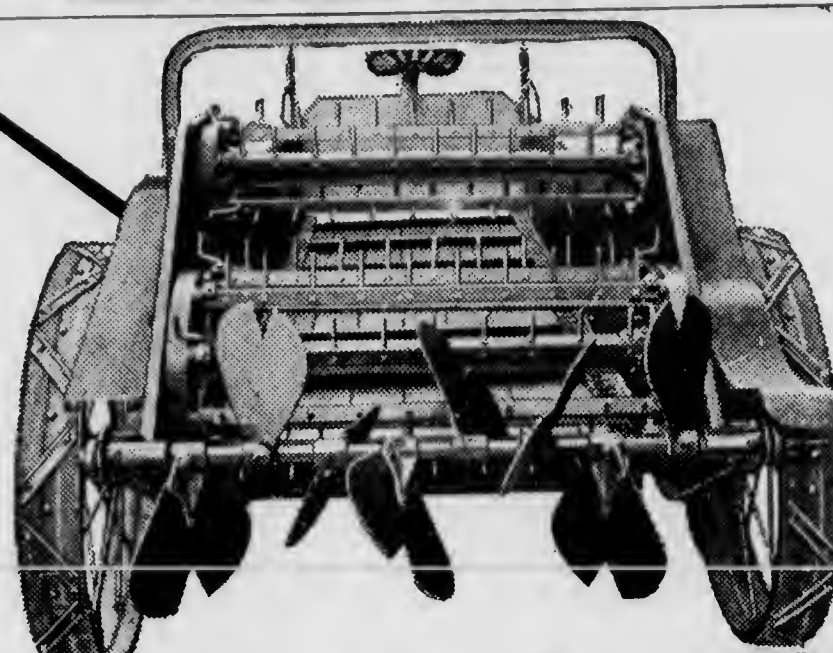


## FARQUHAR "Non-Wrap" SPREADER

MAKES AN  
Even Distribution  
THEREBY

### Producing Greatest Yield for the Farmer

EVEN DISTRIBUTION is possible only when beaters deliver an even stream to the distributor. The "Non-Wrap" Beaters of this spreader positively assure complete pulverization and regular, even feed no matter how heavy or light the application.



Uniformly increased fertility brings more money to the farmer. He spends less for labor, saves time, and hauls manure when it is most convenient, for no matter what kind or condition of the manure, the "Non-Wrap" makes an even distribution.

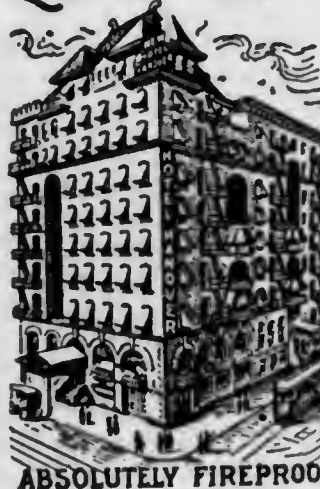
It is distinctly to your interest to know about the "Non-Wrap" Spreader. Write today for Big Bulletin.

A. B. FARQUHAR CO., Limited

Box 681

York, Pa.

#### EUROPEAN PLAN



### The HOTEL HANOVER

ARCH STREET at TWELFTH  
PHILADELPHIA, PA.

One Block from Reading R. R.  
Two Blocks from Penna. R. R.

Rooms \$2.00 and Up  
Special Luncheon \$.50 Special Dinner \$1.00  
W. C. FONTAINE, Pres. & Mgr.

TRADE  
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# NICE

REG.  
U.S.A.

THE NAME TO GO BY—WHEN YOU GO TO BUY  
PAINT AND VARNISHES  
Write for color Cards and Booklet "Paint Pointers"  
EUGENE E. NICE COMPANY, Inc., PHILADELPHIA



#### Tuberculin Tested Milch Cows

Subject to 60 day retest  
Registered and High Grade  
Immediate Delivery  
Anderson's Sale & Exchange Stable  
Edinburg Road  
R. F. D. 2, TRENTON, N. J.  
Bell Phone 3099 R2

#### Cumberland County Poultry Flocks, Head State

Two Cumberland County, Pennsylvania, poultry growers led the demonstration farms of the state in egg production during August, the Pennsylvania State College poultry extension service announces.

Mrs. I. V. Otto, Carlisle, Pa., was first with 145 White Leghorns laying an average of 23.8 eggs per bird. A flock of 172 White Leghorns owned by John H. Polar, Mechanicsburg, was next with an average of 23.1 eggs per bird.

Other high laying flocks were those of Mrs. Thomas P. Gill, Jackson Centre; Joseph Hillier, Cooperstown and Mrs. P. H. Helm, Jackson Centre.

Poor land is scarce where cows are abundant.

Let Us Design Your  
Stationery

Horace F. Temple

Printer

Bell Phone No. 1  
WEST CHESTER, PA.

#### Bi-Monthly Meeting of Directors, Inter-State Milk Producers' Assn.

The regular bi-monthly meeting of the Board of Directors of the Inter-State Milk Producers' Association, was held at its headquarters, in the Flint Building, Philadelphia, Pa., on October 10th and 11th, 1928.

Those who attended the meeting included Frederick Shangle, vice president; R. W. Balderston, secretary; Robert P. Brinton, treasurer; Ralph I. Zollers, assistant secretary; Frank M. Twining, assistant treasurer and the following directors: S. K. Andrews, J. H. Bennet, Ira J. Book, E. H. Donovan, E. Nelson James, J. W. Keith, H. I. Lauver, A. R. Marvel, I. V. Otto, J. A. Poorbaugh, C. F. Preston, Albert Sarig, C. C. Tallman, R. I. Tussey, Harry B. Stewart, S. U. Troutman, Frank P. Willits and A. B. Waddington.

President Allebach for the first time since his connection with the organization, was absent, he having been called to Chicago, Ill., to assist the Chicago Pure Milk Producers' Association in connection with their marketing problems and to speak at a large farmers' mass meeting in that city.

The meetings of the directors were presided over by Frederick Shangle, vice president.

At the first session formal reports of the secretary and treasurer were received and approved. Following the general discussion of business and market conditions, secretary Robert W. Balderston made a report of his trip abroad, in connection with the World's Dairy Congress, held in England. The report was illustrated with motion picture films showing milk production and distribution methods. These he had taken during his trip abroad, which included visits to England, Scotland, Germany, Holland, Switzerland and France.

F. M. Twining, in charge of field work in testing and membership work made a report on the work of that department. The report of the annual meeting committee, Frederick Shangle, chairman, outlined briefly the work of the committee and the development of various plans for the meeting and entertainment.

At the second day's session reports by the individual directors, which were partly given during the previous day's session, were continued.

Marketing conditions were generally satisfactory, silo filling was pretty well under way, the corn crop in many sections was exceptionally good while in others it was only fair. Pasture was, for the most part, good while hay crops have been generally satisfactory.

The committee which has been considering the subject of closer cooperation with the local units of the association presented a tentative report. Already a number of plans have been adopted that will enable a closer check. Considerable attention has been given to a membership study and a probable closer codification of the membership records in the office.

C. I. Cohee, director of the Quality Control Department, outlined the activities and development of the work in the field and the probable development of various factors entering into the quality of the milk supply.

All dairymen should see to it that they have ample provisions for their cows for the winter months. If there is any doubt they should get more supplies or cut down their herds.

## CODE OF ETHICS

Adopted at the Annual Meeting of the National Cooperative Milk Producers' Federation

The following Code of Ethics was adopted by the National Cooperative Milk Producers' Federation for itself and its member organizations at its 12th annual meeting held in Memphis, Tenn. This code should serve as a development of standards of conduct and relationship between member organizations and the Federation.

(1) The member association, in selling milk or milk products of its members, will endeavor to obtain that price which is to their best interests on a long time basis.

It is the job of the management to sell milk, taking long time factors into consideration. It is the responsibility of every co-operative to be just as good a salesman as possible.

(2) As between buyers and sellers, whether producers, dealers or consumers, the interests which they hold in common are always of greater importance than their differences of viewpoint or of interest.

For instance—It has been proven that where the consumer has a full knowledge of all the facts of the market he is satisfied to pay a higher price when higher production costs obtain, or when a higher quality of product is offered. The distributor, moreover, is always in a more favorable position when he can justify to both producer and consumer the justice of the factors entering into his "spread."

(3) Member associations will endeavor to thrash out differences with the buyers in conference. (Every good salesman wishes to meet personally with his customer. Recriminations in the end react to the disadvantage of all. No good salesman will intentionally set up sales resistance.)

(4) Bargains will be kept by member associations.

Unless changed by mutual consent, a bargain should be kept no matter how hard the shoe pinches. Farmers have always had a reputation for strict honesty. The milk dealer is peculiarly sensitive to public opinion.

(5) Prices will be the same to all buyers of a member association purchasing under substantially similar market conditions.

Certainly one of the most valuable contributions which our member associations have made in the fluid milk marketing field, has been the publishing of a uniform price list to be followed by all buyers purchasing the milk of its members.

(6) Member associations always put the emphasis on quality of product.

This principle has been responsible for much of the good will en-

joyed by the co-operative movement throughout the world. Because of the importance of milk as a food and the necessity of high sanitary safeguard, the dairy cooperative has perhaps, an especial responsibility in this regard.

(7) All advertising and publicity of member associations or that in which they are interested will be kept on a constructive, educational basis.

There is so much that can be said about dairy products being of a unique, nutritional value that exaggeration or invidious comparison is unnecessary, and generally positively harmful. The producer has at all times, perhaps, a greater interest in the total consumption of dairy products in whatever form, than has the member of any other group within the dairy industry.

(8) Member associations will give due consideration to the interests of the consumer and distributor, and aid in furthering the best interests of the industry as a whole.

Time is fast past when the co-operative ignored the importance of the dealer's spread, or the customer's welfare.

(9) Every member association shall hold itself in readiness to aid every other member association and every other dairy co-operative in carrying out its proper purposes and activities.

Weakness in the co-operative movement among one group of dairymen always react to the disadvantage of other groups.

(10) The common welfare of the movement represented by the National Co-operative Milk Producers' Federation is always of more importance than the individual interests of any one of the member associations of the Federation.

The members of the Federation have always, recognized the truth of this statement. The nationally recognized position of the Federation is sufficient evidence.

(11) Member associations will thrash out their differences in conference. Changes in market areas; the invasion of new markets by the producers of by-products are but a few of the questions which our member associations solve by the conference procedure.

(12) The Federation stands ready at all times to arrange through arbitration, for the adjudication of differences between member associations which prove impossible of solution through the conference method.

It is to the honor of the Federation and its members that this obligation of the Federation in the past has been almost never invoked.

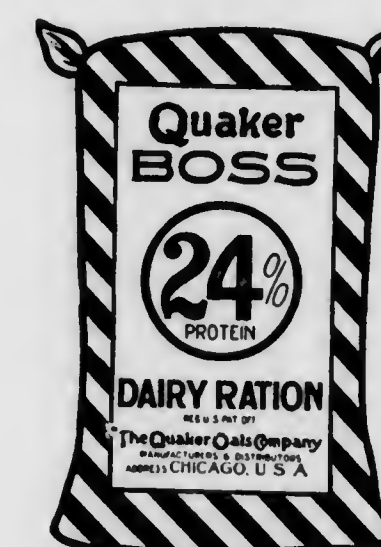
#### Save Heavy Spring Work

If manure is hauled out and spread daily during the winter months it saves double work in the spring.

All Lit Up—TO LET—Large garage by man with four windows.—Ad in a Riverside (Cal.) paper.

BUY THE FEEDS IN STRIPED SACKS

# The most milk for the least money



Essential minerals in just the right form and proportion—and molasses in dry form—are contained in this feed. Palatable, digestible, and profitable!

GETTING maximum milk production is one problem. Getting that production at the lowest possible cost is another. And Quaker offers you help in the solution of both. Quaker Boss Dairy Ration enables you to make profit by getting maximum production. Quaker Boss is fresh and pure. Great purchasing, storage, and manufacturing resources enable us to place Quaker Feeds within reach of every herd owner. Quaker Boss Ration contains the essential ingredients a cow must have to make milk. It is always uniform, always safe, always profitable. See the Quaker Dealer near you.

#### Quaker Sugared Schumacher Feed

Just the feed for combining with Quaker (16%) or Quaker Big Q (20%), or Quaker Boss (24%), or any high protein concentrate. Sugared Schumacher is a choice feed for young or dry stock; an entire grain ration for horses, and a splendid fattening ration for steers, lambs and swine.

Made by The Quaker Oats Company Chicago, U. S. A.

BUY THE FEEDS IN STRIPED SACKS

#### Tile Drainage Repays Cost

Tile drainage systems installed on New York state farms have paid for themselves in the current year alone, says B. B. Robb of the department of rural engineering at the state college of agriculture. They increase crops, remove wet areas, and permit the use of modern farm machinery where the open ditch does not.

Professor E. R. Gross, agricultural engineer at the New Jersey experiment station, agrees with Professor Robb. He cites the case of Dory Peters of Flemington, New Jersey. Mr. Peter's farm had two or three low spots about one and a half acres in area in which plowing, planting and cultivation were difficult. An engineer inspected the field and found that 200 feet of 6-inch and 700 feet of 4-inch drain tile, costing \$80 would be sufficient to turn the swampy areas into productive land. None of the ditches for the tile needed to be dug deeper than 2 1/2 feet. It was estimated that about four crops would pay for the entire operation, and accordingly the work was begun.

In many cases only one drain is required to rid the farm of a wet spot which has menaced the farmer for years. The cost of installation is more than repaid by the increased productivity of the land, the removal of the wet area which has interfered with plowing and cultivation and the improved facilities for the use of heavy farm implements.



# GREEN'S HOTEL

8th and Chestnut Streets  
PHILADELPHIA, PENNA.

ROOMS: Without Bath \$2.00  
With Private Bath \$3.50

TRY OUR FAMOUS  
DOLLAR DINNER

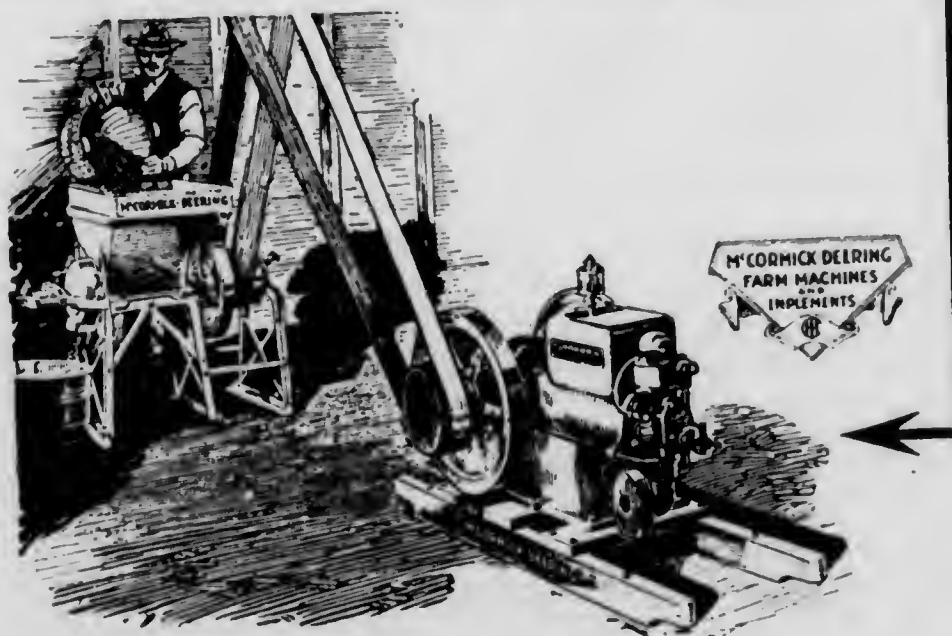
11 A. M. to 8 P. M.

GEO. C. HORNER, Manager

## Facts About Feed

The man who has had experience feeding stock knows that if whole corn or oats is fed a portion of it passes through the intestinal tract undigested. It fills the stomach and satisfies the hunger, but is actually wasted as far as nourishment is concerned, because it adds nothing to the weight of the stock. By experiment this waste has been found to be from 12 to 26 per cent. Therefore every farmer can save from 12 to 26 bushels out of every 100 bushels of grain by using a McCormick-Deering

FEED GRINDER. Turn waste into weight. There is a suitable type and correct size grinder to meet the needs of every farmer. And they could not be operated more economically than by a McCormick-Deering ENGINE



International Harvester Co.  
OF AMERICA

BALTIMORE PHILADELPHIA HARRISBURG

## National Cooperative Milk Producers' Federation

(Continued from page 9)  
its power to increase the quality of products marketed by such organizations. The Committee further recommends that the National Cooperative Milk Producers' Federation go on record as favoring the highest possible standards controlling the production and handling of milk and milk products, and that the United States Department of Agriculture should have charge of recommending and enforcing any standard milk regulations.

Following the report of the nomination Committee the following directors were formally elected.

**Butter**  
C. Bechtelheimer, Waterloo, Iowa.  
John Brandt, Litchfield, Minn.  
P. L. Betts, Chicago, Ill.

**Cheese**  
F. G. Swoboda, Plymouth, Wis.  
W. S. Moscrip, Lake Elmo, Minn.

**Other Manufactured Dairy Products**  
W. F. Schilling, Northfield, Minn.  
A. G. Ziebell, Marysville, Wash.  
G. H. Bendendorf, Modesto, Calif.

**Fluid Milk and Cream**  
W. P. Davis, Boston, Mass.  
Harry Hartke, Covington, Ky.  
G. W. Slocum, New York, N. Y.

**At Large**  
John D. Miller, Susquehanna, Pa.  
Frank P. Willits, Ward, Pa.  
R. Smith Snader, New Windsor, Md.  
C. E. Hough, Hartford, Conn.  
P. S. Brennehan, Jefferson, Ohio.  
B. Ashcraft, Chardon, Ohio.  
N. P. Hull, Lansing, Mich.  
C. F. Dineen, Milwaukee, Wis.  
H. D. Allebach, Philadelphia, Pa.  
M. L. Whiteman, Liberty Center, O.  
J. H. Mason, Des Moines, Iowa.  
T. H. Brice, Los Angeles, Calif.

The following cities filed requests that the 13th Annual Meeting be held in their respective cities:—Detroit, Mich.; Toledo, Ohio; Minneapolis, Minn.; Des Moines, Iowa; Hartford, Conn.; and various cities in the state of New York. These requests were referred to the Executive Committee.

Adjournment followed, after which the Board of Directors met for the purpose of formally organizing.

Harry Hartke, Covington, Kentucky, vice-president of the Cooperative Pure Milk Association, Cincinnati, Ohio, was elected president of the Federation, succeeding John D. Miller, who no longer wished to be considered a candidate for the office; John Brandt, Litchfield, Minn., vice-president, Land O'Lakes Creameries, Inc., Minneapolis, Minn., Treasurer, Frank P. Willits, Ward, Pa., Director Inter-State Milk Producers' Association, Philadelphia, Pa.; Secretary, Charles W. Holman, 1731 Eye Street N. W. Washington, D. C.

The following executive committee of the board was also elected; Harry Hartke, Cooperative Pure Milk Association; John D. Miller, Dairyman's League, Inc.; F. G. Swoboda, National Cheese Producers' Federation; C. E. Hough, Connecticut Milk Producers' Association; Frank P. Willits, Inter-State Milk Producers' Association; John Brandt, Land O'Lakes Creameries, Inc.; and H. P. Hull, Michigan Milk Producers' Association. The following alternates were also elected.

G. W. Slocum, Dairyman's League, Inc.; R. Smith Snader, Maryland State Dairyman's Association and Clyde Bechtelheimer, Iowa Cooperative Creamery Secretaries' and Managers' Association.



## Is Your Manure Pile Leaking Dollars?

Manure stored in an open barnyard loses more than half its fertilizing value by seepage, according to tests made by the New Jersey Agricultural Experiment Station. "At present prices of crops, manure has produced crop increases equal to about \$4.00 per ton of manure applied," reports the Purdue University Agricultural Experiment Station.

### Use all of Your Manure — Build a Concrete Manure Pit

A concrete manure pit saves enough fertilizer in one year to pay for itself.

Plans and complete information on how to do the work is given in our manure pit booklet. Write today for your free copy.

### PORTLAND CEMENT ASSOCIATION

A national organization to improve and extend the use of concrete

1315 Walnut St., Philadelphia  
Concrete for Permanence

## for Healthful Cleanliness

### in Barns and Equipment

will bring you bigger profits. Clean cows and sterile utensils make pure, clean, sweet milk, the kind that brings better prices from particular flocks.

### STERILAC

is the ideal dairy sterilizer. Use it for washing udders, for rinsing pails, milking machines, bottles—all equipment. Powerful, non-poisonous and non-caustic. Will not taint milk. Endorsed by experts.

Ask your dealer for Sterilac. If he is not supplied send us his name and \$1 for trial package, enough to make a barrel of standard solution. Booklet Free.

The Sterilac Company  
Dept. RM, North Chicago, Ill.



### CRUMB'S STANCHIONS

Also Water Bowls  
Litter Carriers  
Feed Carriers  
Steel Stalls  
Steel Partitions

I can SAVE MONEY for you. Send for booklet.  
WALLACE B. CRUMB  
Box 2, Forestville, Conn.



## High Grade Dairy Cows in HIGHTSTOWN, N. J.

We handle all kinds of cattle  
Holsteins — Guernseys — Jerseys  
A Specialty

All cows tuberculin tested and sold subject to a 60 or 90 day retest and fully guaranteed in every respect.

Free delivery any distance.

B. ZAITZ & SON

202 Mercer Street  
Phone 72 Hightstown, N. J.

## For Bigger Milk Producers Feed Calves on DRY SKIM MILK

There is no substitute for milk in raising good milk producers. Start calves on whole milk cream gradually to skim milk (dry skim milk and water) which costs less than 1 lb. as much. Then change to grain mixture, plus dry skim milk.

Dry skim milk gives vitamins, proteins and calcium... all necessary to calves. Dry skim milk reduces digestive disturbances. Write for bulletin 301... contains important, valuable information on calf raising—FREE! Or send 50c for 4-lb. sample.

AMERICAN DRY MILK INSTITUTE, Inc.  
160 N. La Salle St. Room 720W Chicago

## END SICKNESS THIS NEW WAY

No medicine, drugs or dieting. Just a light, small, comfortable inexpensive Radio-Active Pad worn on the back by day and over the stomach at night. Sold on free trial. You can be sure it is helping you before you buy it. Over 150,000 sold on this plan. Thousands have written us that it healed them of Neuritis, Rheumatism, High Blood Pressure, Constipation, Nervous Prostration, Heart, Lung, Liver, Kidney and Bladder trouble, etc. No matter what you have tried; or what your trouble may be, try Degene's Radio-Active Pad. Pad at our risk. Write today for FREE Trial offer and descriptive literature. Radium Appliance Co., 2611 Bradbury Bldg., Los Angeles, Cal.

## Quietness and convenience in PHILADELPHIA'S NEW HOTEL

### THE ROBERT MORRIS

17th and Arch Streets  
Rooms all outside and with bath. All beds equipped with box springs and Nachman inner hair spring mattresses.

Radio in Every Room  
Single rooms \$3.00 3.50 4.00  
Double rooms 4.50 5.00 6.00  
LUNCHEON .60 and .75  
DINNER \$1.00, \$1.15, \$1.50

## Alfalfa Hay For Sale

Weights and grades guaranteed. Prompt shipment. Write for delivered prices.

JOHN DEVLIN HAY CO., Inc.  
192 N. Clark St., Chicago, Ill.

## Dairy Cows Need Succulent Feed When Pasture is Poor

During the late summer and fall, pastures in most sections are short because of dry weather and because they are grazed too closely. If there is any grass, it is not succulent and is unpalatable. Consequently, cows will not consume enough for high milk production.

Experienced dairymen know that if the production of their cows has decreased during the hot, dry weather because of insufficient feed, it is difficult and practically impossible to bring the production back to normal during that milking period.

The summer silo, according to the United States Department of Agriculture, is probably the best means of supplementing short, dried-up pastures. For a herd of 12 to 20 cows, a silo from 10 to 12 feet in diameter is best suited for this purpose because the silage can then be fed out fast enough to prevent spoiling. If however, all the silage is not fed during the summer it can be fed the following winter or the next summer. Silage will keep for several years. Dairymen frequently fill two silos, one for winter feeding and one for summer use.

Where it is not feasible to erect a silo for summer feed the short pasture may be supplemented by certain pasture crops instead of summer silage. In many sections sweet clover has proved very satisfactory for this purpose. It does well at this season and has the advantage of being a legume and consequently contains a large amount of protein. Alfalfa can also be pastured at this time and will assist materially in preventing the mid-summer drop in milk flow.

Many combinations of legumes, such as peas, vetches, and soy beans, with grains, such as corn, wheat, oats, barley, and rye, can be grown and fed green. Successive plantings of these crops will often provide succulent feeds over an extended period. Sudan grass is also well suited for grazing purposes throughout the Central West.

In addition to good pasture high producing cows need to be fed grain to supply the required nutrients. Cows producing more than 20 pounds of milk daily should be given 1 pound of grain to each 4 to 6 pounds of milk produced. The grain feed may be a mixture of corn, oats, wheat bran, or barley, and should always be ground. For cows producing more than 35 pounds of milk daily the grain mixture should contain one high-protein concentrate, such as the oil meals.

## High Crop Value of Penna. Farm Products

Nine Pennsylvania counties each produced principal farm crops valued at more than \$5,000,000 in 1927, and only eight produced less than \$1,000,000 worth of these farm crops, according to the bureau of Statistics, Pennsylvania Department of Agriculture.

Lancaster County produced almost as much in value of principal farm crops as the States of Delaware and Rhode Island combined and the Commonwealth as a whole produced more in value of all farm crops than the total of ten states—Arizona, Connecticut, Delaware, Nevada, New Hampshire, New Mexico, Rhode Island, Utah, Vermont, and Wyoming.

Soil gives returns as well as the bank. Spend a little money to lime your soil this fall and collect your interest next spring.

## Official Standards Established for Cattle Classes and Grades

Official United States standards for grades of slaughter cattle, vealers and slaughter calves, and veal and calf carcasses, have been established by the United States Department of Agriculture and became effective July 1, 1928, under an order signed by Secretary Jardine.

Slaughter cattle are divided into five classes—steers, heifers, cows, bulls and stags. Standards are provided for seven grades in each class. Vealers and slaughter calves are divided into three classes—steers, heifers and bulls. The same division is made for veal and calf carcasses, although in the case of immature animals, sex condition, on which the classes are based, is relatively unimportant. There are standards for six grades of vealers and slaughter calves as well as for veal and calf carcasses. Weight segregation is also an important market factor, and this has been taken into consideration in determining the various subdivisions.

Public hearings on the classes and grades of livestock and meats were held in numerous cities throughout the country late in 1925 and 1926, at which the sentiment of producers, slaughterers, wholesale and retail meat dealers, agricultural college teachers and others interested in the livestock and meat industries was overwhelmingly in favor of the standardized grades as presented.

The system of standardized grades for livestock and dressed meats, of which the grades for slaughter cattle, vealers and slaughter calves and veal and calf carcasses are a part, has been used continuously by the Bureau of Agricultural Economics in its wholesale livestock and meat market reporting service since February, 1917. The standard grades for veal and calf carcasses have also been applied to the grading of millions of pounds of meats for Federal and State institutions as well as large commercial concerns. Official standards or grades of carcass beef were made effective on July 1, 1926, and have been in use since that time.

## New Jersey Market Reports Show Apple Sales on Farms

The reporting of apple sales on the farm is a new feature in market news reporting which has been started by the State Department of Agriculture through its Bureau of Markets. This service has been inaugurated to acquaint New Jersey farmers with the latest quotations and aid them in obtaining the best possible price for their product.

The great increase in the use of the truck for marketing purposes has enabled New Jersey growers to make frequent sales of their apples on the farm to buyers or speculators from nearby cities. This has raised a problem in some sections, particularly where apples are more or less of secondary interest, dairying being paramount, as many of the growers do not know the value of their product and buyers are quick to take advantage of these conditions.

The Department has endeavored to correct this situation by obtaining a daily report of the actual sales of apples at the farm by leading growers who are well posted and who should know what the market is for their particular quality, grade and pack of fruit.

Power means ability to strive and do. To gain it we all must work, it can be had by me or you, But never by those who shirk.



Once again  
the enthusiastic choice  
of the  
Inter-State Milk  
Producers' Association

and once again  
preparing to merit  
that choice

The  
Benjamin Franklin  
Chestnut at Ninth Street  
Philadelphia

Horace Leland Wiggins  
Managing Director

## USE FEEDS CONTAINING OBERCO Louis M. L. Merryman GUERNSEY BREEDER, SAYS:

"I get better calves, and calving troubles have been almost entirely eliminated since feeding

## OBERCO ORGANIC MINERALS

### "THE BACKBONE OF THE FEED"

FOR COWS • HOGS • POULTRY  
HEALTHY, well-conditioned cows get good calves. Unless your feed contains plenty of mineral matter, your cows must withdraw minerals from their bones and bodies for milk production and calf development. Ample minerals in the feed result in better calves and more milk. Our booklet, "Minerals for Farm Animals," tells why minerals are necessary and why OBERCO is the most effective, digestible and economical mineral mixture. Write for Free Booklet 110

EAST COAST TRADING CO.  
110 East Lombard St.  
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USE FEEDS CONTAINING OBERCO

## HOLSTEINS Are Hardy

For 2000 years  
Holsteins have been bred for ruggedness. They thrive in all climates and sections without expert care and produce profitably under varied conditions.

Write for literature  
The HOLSTEIN-FRIESIAN  
ASSOCIATION OF AMERICA  
230 East Ohio Street Chicago, Illinois



# De Laval Milker Users Are Making Greater Profits, Cleaner Milk and Avoiding Worry



Every cow is milked at the same speed and in the same manner day after day. Uniform and gentle action, as every dairymen knows, is the most inducement to maximum and consistent production.

The sanitary design of the De Laval Milker enables the production of cleaner milk with greater ease and certainty. The labor-saving feature of the De Laval method of milking eliminates labor troubles and worry of this kind.

DE Laval Milker users invariably say that they "—would never go back to hand milking" or "—would give up dairying if the De Laval Milker could not be used." A universal attitude such as this is not founded and fostered by chance. It is based upon years of more than satisfactory results in the form of greater production, cleaner milk, time and labor saved and the elimination of a major portion of the care and worry so often experienced by dairymen.

The great records made by De Laval-milked cows are bits of outstanding evidence that the uniform, gentle and correct action of the De Laval Milker *does* produce more milk consistently. However, these records are but the highlights for the higher herd averages and increased milk checks of thousands of dairymen tell the same story in an equally impressive manner.

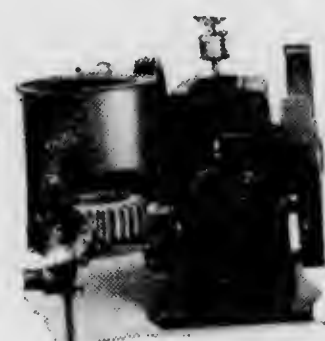
The necessity of producing cleaner milk gains added importance each day that passes. Milk must be cleaner and the De Laval Milker offers the ideal solution to this problem. Its many exclusive, sanitary features enable the production of low count milk *with less expense and with greater ease and consistency*. Results and years of experience under every possible condition prove this.

The banishment of worry—the elimination of the ever-growing and serious labor question as it concerns dairy workers—added pleasure and satisfaction in dairying—these are other boons that the De Laval Milker brings to dairymen.

Write for complete information or ask to have a representative call at your place. No obligation.

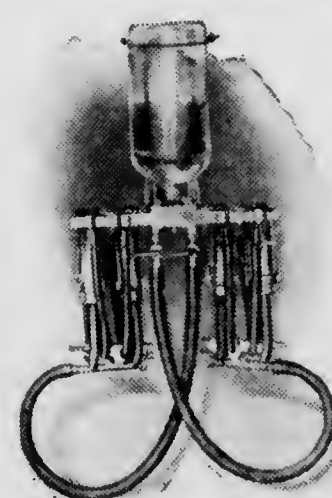
# De Laval Milker

## Alpha Exhaust Water Heater



Provides a convenient and economical means of heating water for washing milkers. Designed for use with Alpha Engines but can be attached to most all engines. It is scientifically designed to absorb all the exhaust gases from the engine for heating purposes without introducing back pressure. It holds 3½ gallons of water. Sold by Authorized De Laval Dealers.

After the milker is cleaned it can be kept clean until the next milking by means of the De Laval Solution Rack. This device overcomes any objections heretofore encountered in the use of chemical solutions for sterilizing milkers. It fills the teat-cups and tubes full of solution and eliminates the possibility of air pockets. With this device the solution can be used but once so it is always full strength, and since the solution is applied only to the inside of the rubbers very little is required. Sold by Authorized De Laval Dealers.



THE DE LAVAL SEPARATOR CO.,  
165 Broadway, New York  
600 Jackson Blvd., Chicago  
61 Beale St., San Francisco

Please send me, without obligation, full information on ☐ Milker ☐ Separator (check which)

Name.....

Town.....

State.....

R.F.D.....

No. Cows.....

# Milk Producers' Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER

Volume IX

West Chester, Pa., and Philadelphia, Pa.

N, Inc.

No. 8

## Twelfth Annual Meeting Inter-State Milk Producers' Association, Inc. Philadelphia, Pa.

At no previous meeting of the membership of the Inter-State Milk Producers' Association, Inc., was the attendance, both on the part of accredited delegates from Local Units, as large or the representation of the individual membership so numerous as that attending the Twelfth Annual Meeting of the organization, held at the Benjamin Franklin Hotel, in Philadelphia, on Thursday and Friday, November 22nd and 23rd, 1928.

It was a highly representative gathering of the membership and included delegates and members from the states of Pennsylvania, Maryland, New Jersey,

## Twelfth Year

By H. D. ALLEBACH, President

Inter-State Milk Producers' Association, Inc.

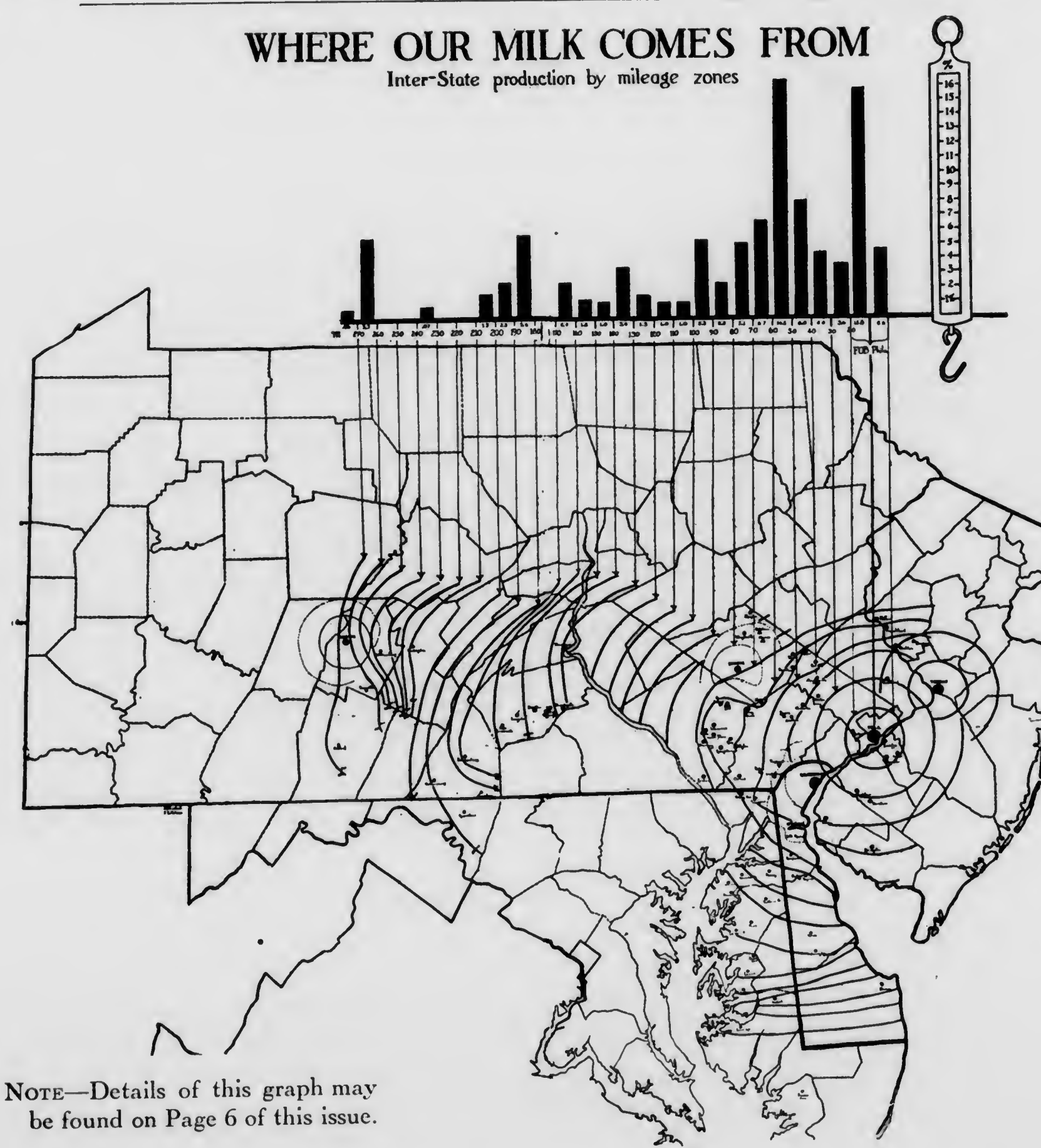
As one year follows another in the history of the Inter-State Milk Producers' Association there are two accomplishments that stand out so boldly that now they have received national and even international recognition.

One of these is the very narrow "spread" or margin between the price to the farmer and the price to the consumer in Philadelphia and other markets in this territory.

The other feature is the demonstration of a successful quality control program based on regulations established by the industry itself and carried into effect by the Quality Control Department of the Dairy Council.

## WHERE OUR MILK COMES FROM

Inter-State production by mileage zones



NOTE—Details of this graph may be found on Page 6 of this issue.

Delaware and West Virginia. Fully twice as many official delegates, as compared with last year, attended the meeting and took an active part in the business of the Association. The Thursday morning session was of an executive nature. It was opened with an address by Michael C. Guglio, Assistant Director, Philadelphia Department of Public Health, who in the name of that Department welcomed the delegates and members to Philadelphia.

The meeting was officially opened by H. D. Allebach, president, and a call for the meeting was read by the secretary. Following the reading of the minutes of the last previous annual meeting the president announced the appointment of the following general committees.

### Nomination Committee

W. O. Sumner, Chester County, Pa., Chairman

P. M. Marvel, Talbot County, Md.

Wm. Miller, Montgomery County, Pa.

(Continued on page 9)

### Low "Spread"

In these days when there is so much said about rising costs of distributing farm products to consumers, an example of a comparatively narrow margin or "spread" between the price to the farmer and the price to the consumer is of extreme interest and importance. It has been done, first, by a close study of all the factors involved. Then by the application of sound business principles, absolute fairness and integrity, and a co-ordinated effort of the producers' organization and the distributors to eliminate not only all unnecessary costs but expensive competition and other abuses which are prone to grow up in any unregulated industry. The factors involved have been outlined many times. Among them are high quartage load per wagon, interested co-operation of milk salesmen, equal price to all buyers for milk of the same quality under similar conditions, and utilization of all equipment, country and city, to approximately full capacity.

### Quality Improvement Work

When four years ago we started out on a campaign to improve sanitary conditions on the farms and in the milk plants of this territory so that eventually

(Continued on page 6)



## EIGHTH ANNUAL REPORT PHILADELPHIA INTER-STATE DAIRY COUNCIL

By R. W. BALDERSTON, Executive Secretary

The year ending October 31st, 1928, is marked in the annals of the Philadelphia Inter-State Dairy Council by a number of significant developments in the organization's activities to increase consumption of milk and its products. Outstanding among these developments may be enumerated: The service to milk dealers through schools for salesmen; increased facilities for co-operating with rural groups in arranging programs; and the replacing of temporary permits with permanent ones as well as in further standardizing the regular work in nutrition and food selection.

### Scheduling a Year Ahead

The advance scheduling of the Dairy Council's school programs exceed the previous year's record. During the month of June, ninety percent of the Philadelphia public schools requested that dates be reserved for them on our schedule for 1928-29. Practically all available time for stories and plays through the entire school year was engaged before the school's year opened. Due to the tremendous demand for Dairy Council programs it was necessary to limit the amount of time given any single school, by the Health Dramatic Department, to the presentation of two stories and one play.

### Developing the Rural Program

Special attention has been given the development of educational programs for rural groups. Members of the Dairy Council staff have been assigned to this phase of the work in order that careful consideration might be given each request for material. To increase our facilities for serving these groups, a twelve-page booklet, "Suggested Programs for Rural Groups," has been prepared and will be ready for distribution after January 1st, 1929. This booklet, as indicated by its title, will provide a variety of suggestions for arranging programs for various school grades, Granges, Parent-Teacher Associations and the like. Material listed in these programs is described in full, and can be secured from the Dairy Council.

### Dramatizing a Rural Message

Three years ago, the Dairy Council after considerable study evolved a country program which, it is believed, would be an aid in securing the attendance of the dairymen at its country meetings. The plan proved a successful one and has been continued since that time. During the latter end of the fiscal year preparations were completed for a new play, replacing "Judge for Yourself," which has been shown at meetings throughout the Philadelphia Milk Shed. The new play "What's the Big Idea?" with a new message, stresses the need of organization among farmers. It will be shown in co-operation with the Inter-State Milk Producers' Association at meetings in various points in the territory.

### Permanent Permits

In January of this year, the Directors of the Dairy Council passed a resolution which required that every farmer hold a permanent permit by June 1st, 1928, showing that his dairy had passed inspection. Immediate plans were made to handle requests for inspection of those dairies operating on temporary permits. Practically all the dairymen in the Philadelphia Milk Shed were in possession of their permanent permits by June 1st. Those who found it necessary to discontinue shipping by reason of not having permanent permits were, for the most part, back in the market by June 15th. This is the first time in the history of the dairy industry in the United States that all the dairymen supplying one of the largest markets in the country have completed the job of meeting self-imposed regulations providing for sanitary conditions of their dairies.

### Barn Inspection Code

A new type of inspection blank has been arranged to supply more specific information and to simplify the work of the inspector. Experts who have observed this new system feel it is a decided advance in record keeping.

### Survey of Milk Service

During the year a survey was made by the Dairy Council of the milk service in the Philadelphia Public Schools, exclusive of school cafeterias. In the 115 schools visited there were 97 offering milk service. Of the 97 there were 16 which served only kindergarten, orthopedic, or nutrition classes. Among the 68 schools reporting the quantity of milk sold daily the average sale amounted to 77.8 one-half pints. The methods of service were by janitor, school lunch room, boys and girls or milk wagon drivers. There were 14 schools reporting a profit on milk sales which was invested in: service equipment, school funds, crackers and straws, janitor, or free milk for needy children.

In view of the fact that there were schools which desired to establish milk service, but had encountered local obstacles, the Dairy Council offered to assume expenses in such instances for ice, straws, and some other overhead charges. A number of schools readily accepted this opportunity and are now selling milk to the children on a non-profit basis.

### Milk Plants and Schools

This year has seen a large increase in the number of schools availing themselves of the opportunity offered by many milk plants, for the children to study at first hand the present-day methods of preparing milk for distribution. In response to a request from a member of a board of education for literature adapted for study by class-rooms, following a milk plant tour, the Dairy Council has prepared "Milk—From Farm to Refrigerator." This leaflet (of which forty-one thousand pieces have been distributed since September,) outlines the various processes and safeguards in any modern milk plant.

### "Early Birds"

A new educational motion picture film "Early Birds" has been produced for the Dairy Council and is now being shown in Philadelphia and in theatres in neighboring cities. This film, based on the adventures of the new milk wagon driver in the play "I'll Tell the World," is suitable for any audience. It contains a direct message to home-keepers on the need of proper care of the morning's order of milk.

### "4-H Club" Activities

Rural 4-H Club work formed one of the important activities through the summer months. A member of the Dairy Council staff was assigned to this field, and conducted courses in foods, and health dramas for 1800 boys and girls between the ages of 12 and 18. As a result, 80 clubs with an average membership of from twenty to forty members will be using Council material throughout this year.

### A Cafeteria Project

A cafeteria project, launched in September by the Philadelphia Dairy Council, is to be conducted throughout the school year in the Smedley Junior High School, Chester, Pa. This project will act as a laboratory experiment to determine what effect—if any—salesmanship and surroundings have upon the popularity of dairy

products, fruits and vegetables in the school cafeteria. As there is no knowledge of such a test having previously been made, the results will, we believe, be highly significant.

### Direct Microscopic Bacteria Counting During the Fiscal Year

Some research work has been conducted with a view of determining the value of direct microscopic bacteria control as a means of improving the market milk supply. More than 5000 bacteria determinations have been made as part of this research investigation. It is expected that at some future time standards may be established for the bacteria content in market milk.

### The Sante Club Idea

Scarcely a year ago the first Health Dramatic Sante Club had its inception in a Philadelphia School, suggested and sponsored by the Dairy Council. The program of this Club consisted practically entirely of Dairy Council dramatics. There are now six of the Sante Dramatic Clubs in existence in various high schools of Philadelphia. The rapid spread of the Sante Club idea would indicate the possibility that this has been the beginning of a new type of organization in high schools, which will be devoted entirely to health dramatics.

### Consultant Service

More and more the Dairy Council is becoming a clearing house for the preparation of health teaching material. This has been evidenced in the consultant service which has played a prominent part in the year's work. Teachers and executives have come to the Council in increasing numbers for teaching aid in health education material. An example of this is shown in the meeting of the nurses of the Philadelphia public schools, held in this organization's offices for a demonstration in the use of Dairy Council material.

The Bell Telephone Company has asked that a course of twenty-two lessons on the relation of foods to health be given to all their supervisors, who will in turn repeat the course to their women employees.

### School for Milk Salesmen

A school for milk salesmen has been another experiment. It is being conducted for three contributing members of the Dairy Council. The purpose of such a school is to increase milk sales by training salesmen in salesmanship, modern safeguards in milk production, and the nutritional value of the product. The course of twelve meetings as conducted by the Dairy Council at present includes such subjects as "The Milk Salesman and His Job," "Preparing Milk for the Consumer," "What a Milk Salesman Should Know," "Milk and Its Uses in the Home," and the "Principles of Salesmanship."

The educational play, "I'll Tell the World," which was developed by the Dairy Council as a means to stimulate higher standards and better methods among milk salesmen has been presented to the employees of thirteen dairies in Philadelphia, Reading, Wilmington and Audubon, with an estimated attendance of 6,980.

### "Tooting Our Own Horn"

Beginning this present month with the new Dairy Council year, news and information concerning the organization's activities will be sent out in a four-page bi-monthly publication, "Tooting Our Own Horn." This illustrated leaflet will enable the Council to report its work in a more readable way and in more detail to those who are interested.

### The Coming Year

The Dairy Council's Annual Meeting occurs in December this year, so plans for its activities for another year must needs be discussed and approved by the new Board of Directors, which will be elected at that time. Routine work under way would seem to indicate that the organization's activities would be largely centered on the following projects:

1. The further development through co-operation with the Inter-State Milk Producers' Association and other agencies in educational work among producers.
2. At least a limited use of direct bacteria count as an aid in emphasizing the importance of cleanliness and prompt cooling of the milk supply of dealers, co-operating with the Quality Control Department.
3. Some experimental work in neighborhood cooking demonstrations such as are proving unusually successful in the work of the English Milk Publicity Council.
4. Improvement of our service to milk dealers in co-operation with their milk salesmen.
5. Further standardization of our service to school teachers and other educational agencies with the preparation and distribution of nutritional and other material.
6. The development of health dramatic work along service lines with particular reference to such matters as free dramatics and the use of health plays for special occasions, such as parent-teachers' meetings.
7. Further development of a nutritional service, when requested, to such organizations as the Bell Telephone Co. and others which have their own health educational departments.

It is evident that as the general public becomes more and more impressed with the fundamental importance of nutrition in a national health program, that the emphasis on the fundamental importance of milk as a food stands out more clearly. Perhaps the Dairy Council needs, in the future, not so much to stimulate an interest in health matters, on the part of the general public, as to be able to furnish specialized information with respect to the field of nutrition, and, in the field of nutrition, to the subject of milk itself.

### Statistics—November 1, 1927 to October 31, 1928

The following statistics show the departmental activities of the Philadelphia Inter-State Dairy Council over a period of a year, ending October 31st. The books of the organization have been audited by McGee, Fleisher & Company and are available for inspection at the offices, 219 North Broad Street, Philadelphia, Pa.

### QUALITY CONTROL DEPARTMENT

No. Inspections—(54 Plant Inspections) .....	33,570
No. Sediment Tests .....	10,827
No. Meetings .....	50
Reels Movies .....	28
Attendance .....	7,385
Miles Traveled .....	237,150
No. Man Days, Fairs and Exhibits .....	494
Methylene Blue Tests .....	494
Bacteria Tests—(Direct Count at 35 Plants) .....	4668 samples

There are approximately 20,000 dairies under inspection.

(Continued on page 10)

## REPORT OF FIELD AND TEST DEPARTMENT

By F. M. TWINING

We are able to report for 1928, as we did for 1927, a continuation of our regular program of service and a constantly growing demand from Inter-State Milk Producers' Association members for the many types of special services which the fieldmen are able to render.

### PERSONNEL

There has been but one change in our personnel during the past year. The average length of service of the nine men of the department is now 4½ years. All the men of the department are farm raised and farm trained, and all have technical training in milk production. These experienced men are located in various parts of our territory, ready at all times to take care of any difficulties that may arise and to relieve the constantly increasing demands on the officers of the Association.

### REGULAR ACTIVITIES

#### Check Testing:—

Eighty-five thousand, five hundred, seventy-seven (85,577) milk plant tests were made during the year. There are, at this time, one hundred, fifty-four (154) milk plants in the territory belonging to cooperating dealers at which regular check-ups have been made during the past year. There were eight hundred, seventy-four (874) test corrections made during the year, or about one per cent.

#### New Membership Contracts:—

Nine hundred, fifty-two (952) new membership contracts were secured by fieldmen between November 1, 1927 and November 1, 1928. The number of cows signed by these contracts was six thousand and fifty (6050), an average of 6.4 cows for each member.

#### Field Visits:—

We made altogether four thousand, six hundred and ninety-nine (4,699) farm visits during the year, of which one thousand, eight hundred, sixty-two (1,862) or 40% were visits to old members to assist with individual problems of production, butter fat percentages, adjustments, etc. The other two thousand, eight hundred, thirty-seven (2,837) visits were made to non-member producers to solicit their membership in the Association.

#### Transfers:—

The fieldmen reported to the office and records departments during the year, the names of three hundred and forty-eight (348) old members who had changed dealers at some previous time without notifying the Association. Unless a constant watch is maintained, many members who change buyers do not receive the services provided for their benefit because they neglect to notify the Association of having made the change.

#### Prevention of Waste in Milk Transportation:—

While checking on the buyers in the interest of the Association members, we constantly find instances where members, themselves, fall down on some detail of management or precaution, the effect of which results in their not getting maximum payments for their product.

The constantly increasing distances that milk is being hauled, makes the problem of preventing loss in shipment relatively greater, but the fact that Inter-State Fieldmen constantly watch for and prevent various sources of loss

which are often overlooked by both producers and buyers, saves thousands of dollars annually to members of this Association.

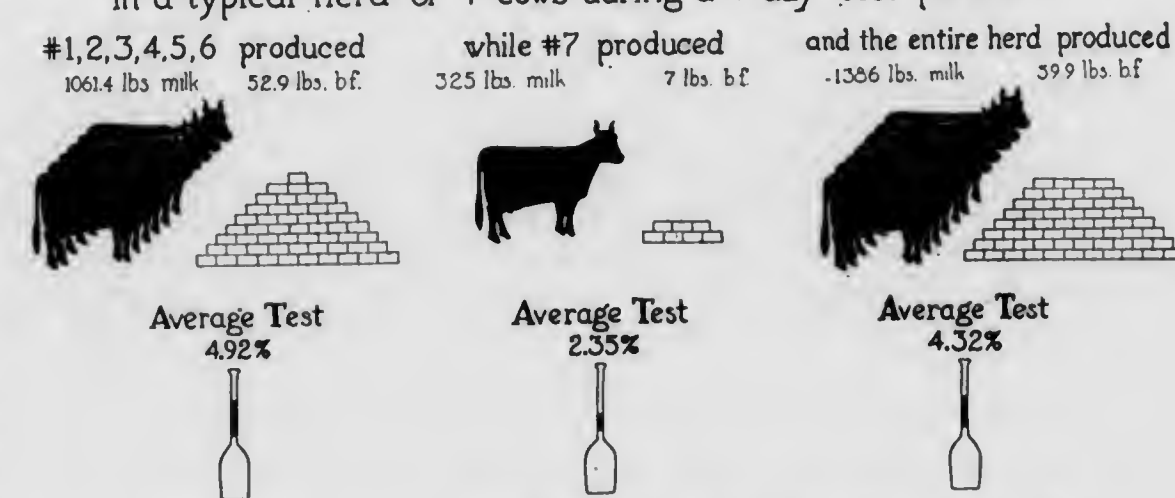
We have cautioned members so often against permitting the cream of milk in transportation to churn into butter that it would seem utterly useless to ever have to mention the subject again, but to fail to do so would permit a tremendous waste.

Another typical instance of waste prevention occurred last winter when a group of members were found, unknowingly, contributing to their own losses by delivering milk to road platforms in the evenings and allowing it to be exposed all night in extremely cold weather. This milk reached its destination in such a frozen condition that it could not be accurately weighed nor could representative samples be taken for butter fat analysis.

A special article dealing with this subject of preventing waste between the time milk is produced at the farm and the time it is delivered to the buyer was

### KNOW YOUR COWS

In a typical herd of 7 cows during a 7 day test period—



One low testing cow brought the herd test down .6 (6%) and resulted in a 24 cent reduction in price of the entire herd output.

(Tests of samples taken over a 7 day period are only of value to determine the average test at some short time period. To find the true production of the herd, samples should cover a 12 month period.)

prepared and printed in the May issue of the "Inter-State Milk Producers' Review."

From our observation of the improved condition in which milk arrives at plants and from the interest shown by members in preventing transportation losses, it is evident that there is now, much less waste than formerly, but nevertheless, much more than there should be, as proper methods of prevention "cost little but save much."

#### Special Test Investigation:—

Three special test investigations were made during the year. In each case a fieldman was placed at the milk plant under investigation for a half-month period.

One such investigation discovered the condition just mentioned, of milk being allowed to freeze and another resulted in having a particular type of weigh tank condemned.

#### Herd Testing:—

Many producers who are not taking advantage of regularly organized Cow Testing Associations, or in whose localities none are available, apply to this department to test out the butter fat yields of the individual cows of their herds. We thus tested out four thousand, nine hundred and thirty-six (4,936) cows in four hundred and forty (440) herds during the past year.

In this way many abnormally low

producers of butter fat have been eliminated from the herds of members. One particularly striking example of the influence of one low testing cow on the whole herd of otherwise high producers is shown in an engraving on this page.

This herd of seven cows produced in seven days 1,386.5 pounds of milk and 59,858 pounds of butter fat. The average percentage of butter fat produced was 4.3%. The average percentage of butter fat of six of those seven cows was 4.9%. The test of the milk of the one cow responsible for reducing the average of the whole herd six-tenths of one per cent (.6 of 1%) was only 2.35%. In another member's herd a cow was found whose milk only tested 1.9% butter fat.

Without going into a discussion of the relative net returns from the production of high or low testing milk, it is at least desirable for producers to know which cows are responsible for either increasing or decreasing the average percentage of butter fat of the herd, particularly is this true where pro-

butter fat, and of decreasing the cost of production of those products through such methods is shown by study of any Herd Improvement records. Very satisfactory results have followed wherever this work has been seriously carried out, year after year.

Denmark, Switzerland and the Netherlands furnish the best examples of dairy herd improvement, the average production per cow of those three countries is three thousand, two hundred (3,200) pounds of milk per year higher than the present average in this country. Denmark was the first to take up herd improvement work, which they started more than thirty years ago. Between 1897 and 1911, a period of 14 years that country raised its average production per cow, two thousand (2,000) pounds of milk and the average percentage of butter fat,  $\frac{1}{2}$  of 1%.

The average production per cow of the whole United States in 1917 was only three thousand, seven hundred (3,700) pounds of milk per year. By 1925 this had been increased to four thousand, five hundred (4,500) pounds.

In the state of Pennsylvania, Herd Improvement work was started in 1910. The average production per cow of the herds in the Improvement Associations has steadily increased, year after year. By 1920 there were ninety-four (94) herds having an average yearly production of over three hundred (300) pounds of butter fat. By 1924, three hundred and one (301) herds, and in 1927, three hundred and seventy-seven (377) herds, and the average milk production per cow has been raised to over ten thousand (10,000) pounds of milk per year. Wisconsin, since 1910, the greatest dairy state in the Union, has the greatest number of Herd Improvement Associations, (over 160) also the highest average production per cow, and shows the lowest average cost of producing 100 pounds of milk.

There are many sections of the Inter-State territory in need of a practical, inexpensive method of getting this valuable work started. Since 1924, we have been experimenting with various methods of enabling Inter-State members to determine which were their high producing and which were their low producing cows.

With the assistance of the County Agents in each case, a modified Herd Improvement Plan has been tried out at Nassau, Delaware, and Princess Anne, Maryland. In 1927 this department helped organize a modified plan in Lancaster County, Pennsylvania, under the direction of County Agent, F. S. Bucher. This has proved very successful. Thirty-one Lancaster County Dairymen finished the first year's work and thirty of them immediately signed up for another year, and in addition, forty-two new members started the work. The cost of operation was 10c per cow per month last year, and will be 11c per cow per month this year.

Under this plan each member purchases about \$3.50 worth of equipment and a set of milk scales, and takes his own samples for butter fat analysis. A local man is employed as many days per month as may be necessary to do the testing and figure out the cost of feed.

(Continued on page 12)



## INTER-STATE MILK PRODUCERS' REVIEW

Official Organ of the  
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The twelfth annual meeting of the Inter-State Milk Producers' Association was an outstanding success. It was a true meeting of the membership body, either in person or by accredited delegates from member Local Units.

At its business sessions there was a frank interchange of opinions on subjects pertaining to organization policies and the officers and directors of the association feel that their program, in the past, as well as for the future, has had every assurance for its continuance.

These meetings presented an opportunity for the presentation of problems, by the membership at large, which may be thoroughly discussed and acted upon so that the future program of the organization may be in full accord and for the best interests of the membership and for the industry on the whole.

In this issue of the Milk Producers' Review, we are presenting, as far as possible, an outline of the various events of the 12th annual meeting. It will be of especial interest to our membership to read these reports and to hear the personal reports of their delegates at the next meeting of their Local Units.

President Allebach's annual report presents a very complete picture of the year's work of the association, and we commend its careful study. It is printed in this issue of the Milk Producers' Review.

The annual banquet of the association was of special interest. The Philadelphia Inter-State Dairy Council, directed the entertainment features, presenting some of its newest educational developments. This program was offered for the amusement and edification of the producers, distributors and the consuming public.

The Philadelphia Inter-State Dairy Council has again completed a very successful year, the eighth since its organization. Its formal annual report presented by its secretary, Robert W. Balderston, outlines in detail the past year's activities. It portrays the full scope of its work during the year as well as proposed programs for the future.

During the past year the Dairy Council has been incorporated under the laws of the State of Pennsylvania, as a non-profit corporation. This change in organization is in line with modern business practice and serves to clarify the relationship of the Council to the Inter-State

Milk Producers' Association, itself an incorporated organization and with other affiliated interests.

A careful reading of the secretary's report, published in this issue of the Milk Producers' Review will be well worth every reader's attention.

### The Dairy Farmer of the Future

The dairy farmer of the future will own a modern farm home. He will be supported by a high-producing herd of well-bred dairy cattle, which will be fed largely from luxuriant, home-grown crops, raised on well-tilled fertile soil. In short, the dairy farmer of the future will know how to live better and will live up to the best that he knows. That is the prophecy of J. C. McDowell, of the Bureau of Dairy Industry, United States Department of Agriculture.

"The dairy farmer of today is progressive," he says, "but in many cases he is passively progressive. He knows what to do but does not always do it. The farmer of the future will never allow one cow to eat up the profits another cow is making. He will allow only high-producing and profitable dairy cows on his fertile farm."

"At the present time the average dairy herd produces about 180 pounds of butterfat a year per cow. The time will come when our dairy herds will double that production. This, however, will not result in overproduction of dairy products, because we shall then keep fewer and better cows. By doubling the average production per cow, it is possible to triple the average income over cost of feed. Thus the dairy farmer will make more money."

"But why do dairy farmers want more money? They want it in order that they and their families may have a better living, which includes better homes and better schools. The time is coming when our dairy farmers and their families are going to have not only a good living and the advantages of the open country but also many of the opportunities and conveniences that are now enjoyed by the people of the cities."

### Bovine TB Reduced Throughout Nation

Since the inauguration of the bovine tuberculosis eradication campaign 11 years ago, the degree of infection throughout the nation has been reduced from four to two per cent, according to the Federal Government.

On October 1, there were 528 modified accredited counties, 22,059,281 cattle under supervision, and 2,303,105 head awaiting the tuberculin test in the United States.

Pennsylvania, with 14, ranks thirteenth among all the states in number of modified accredited counties, and eleventh in number of cattle under supervision.

North Carolina is the first state to complete the tuberculin testing of all cattle. Every county in that State is now classed as a "modified accredited area" which means that bovine tuberculosis has been reduced to less than one-half of one per cent. The amount of tuberculosis infection in the State was slight, making it possible to proceed with the work more rapidly than in sections where the disease is more widespread.

Uncle Ab says it is as easy to make work a pleasure as it is to think of it as a burden.

## Market Conditions

H. D. ALLEBACH

The removal of the surplus schedule of the Philadelphia Selling Plan during November (as was noted in the November issue of the "Milk Producers' Review") and which will also apply during the month of December, 1928, gives our producers a chance to increase their production in both these months at full basic prices. This is a material advantage to our producers in that they will be paid basic prices for all the milk they produce.

This increase in production, we believe, can be done by exercising better care in managing the present dairy herd inasmuch as the price of fresh cows has been ranging at too high a figure to induce producers to greatly increase their numbers of fresh cows.

The market situation throughout the month has shown varying characteristics. For instance, in some sections outside of the Inter-State territory, there has been temporarily a decided shortage, and in others, at the same time, there was a marked surplus above immediate consuming needs. Within the Inter-State territory, the supply and demand have been well balanced on the whole. A few sections report temporary shortages and others have had surpluses which have been used to help out a temporary shortage.

It is extremely difficult at this time to make any prediction for the future with respect to the supply and demand of fluid milk. The butter market also is in a sensitive condition. Changes in the market for dairy cattle will affect the situation. So will variations in the price of dairy feeds. In fact the whole situation is complicated by so many unstable factors, that it is difficult to make any estimate with respect to the future.

### November Milk Prices

All milk shipped to cooperating buyers under the Philadelphia Selling plan will be paid for at Basic prices. The payment of milk on a surplus basis has, during November and December 1928, been eliminated.

Grade B, market milk, three percent butter fat content, delivered f. o. b. Philadelphia, during November is quoted at \$3.29 per hundred pounds.

### Report of the Field and Test Department Inter-State Milk Producers' Association.

The following statistics show the aggregate operations of all the Inter-State Milk Producers' Association field men in connection with testing, weighing and general membership work, for the month of October, 1928.

No. Tests Made ..... 7622  
No. Plants Investigated... 54  
No. Membership Calls... 122  
No. New Members  
Signed ..... 65  
No. Cows Signed ..... 379  
No. Transfers Made .... 17  
No. Meetings Attended . 29  
No. Attending Meetings 644

### Serves Two Purposes

Milk testing not only eliminates the unprofitable cow from the dairy herd, but also serves as a guide in the selection of breeding stock, say State College specialists.

The price of basic milk (basic quantity average) three per cent butterfat content, delivered at Receiving Stations in the 51-60 mile zone, during November, is quoted at \$2.71 per hundred pounds. The usual butterfat differentials and freight rate variations applying at other mileage points in the territory, are shown by quotations on page 5, of this issue of the Milk Producers' Review.

### November Butter Market

Early in the month there was a definite nervous tendency in the market notwithstanding an apparent confidence in the situation. As the month advanced this nervous tendency gradually wore although buying was more of the hand to mouth order. There has been a disposition to market storage stocks in competition with fresh butter. This has been particularly true in the lower grades although some high grade butter was also moved.

Toward the close of the month there was a definite upturn in prices. The last week showed an upturn of 1½ cents and the feeling was decidedly strong.

There has been but little movement in foreign butter. One large block from New Zealand due to arrive about December 15th is being shipped on optional bill of lading.

The statistical situation during the month has been comparatively good. Holdings of storage butter on November 1st, 1928, aggregated 105,904,000 pounds, as compared to 118,679,000 pounds one month ago. This represents a decrease of 12,775,000 pounds and a five year average 105,191,000 pounds. The statistical position on the whole, however, had but little effect on the market.

The market for 92 score butter, solid pack, New York City, opened at 49 cents. Prices gradually moved upward reaching 50½ cents at mid month. A ¾ of a cent drop followed but it appeared to be but temporary, being followed by a steady upward tendency, with the market or the month closing at 52 cents.

There being no milk sold in the Philadelphia market at the surplus price the necessity of quoting such price for November is eliminated.

### Report of the Quality Control Department Philadelphia Inter-State Dairy Council

The following is a report of the work done by the Quality Control Department of the Dairy Council, for the month of October, 1928.

No. Inspections Made ... 3308  
Sediment Tests ..... 172  
No. Permanent Permits  
Issued ..... 176  
No. Temporary Permits  
Issued ..... 144  
No. Meetings Held .... 2  
Attendance ..... 578  
Bacteria Tests Made  
(Plants) ..... 11  
No. Miles Traveled ... 20380

During the month 38 dairies were discontinued from selling for failure to comply with the regulations—15 dairies were reinstated before the month was up.

To date 118,599 farm inspections have been made.

## LATEST MARKET PRICES

**PHILADELPHIA SELLING PLAN**  
The prices quoted below, are those to be paid for "B" milk by all cooperating dealers for shipment during the month of November, 1928. At a conference held on November 5th, 1928, between the Inter-State Milk Producers' Association and the cooperating dealers, it was agreed that all milk purchased during the months of November and December, 1928, should be paid for at full basic prices. Surplus prices therefore, do not apply during those two months.

The following quotations are based on 3 percent butterfat content milk and a differential of 4 cents for each tenth point and 2 cents for each half tenth point up or down, and are for all railroad points. (Inland stations carry differentials subject to local arrangements).

### INTER-STATE MILK PRODUCERS' ASSOCIATION PRICES

This price list is issued with the understanding that it is net to the producers and that all buyers using it as a basis of payment to producers, shall in addition thereto make the following contributions and payments:

(1) To the Philadelphia Inter-State Dairy Council 2c per 100 pounds (46½ quarts) of all milk purchased from any producer at prices listed herein.  
(2) To the Inter-State Milk Producers' Association 2c per 100 pounds (46½ quarts) of all milk bought from members of said Association.  
(3) To the Philadelphia Inter-State Dairy Council 2c per 100 pounds (46½ quarts) of all milk bought from other producers at prices listed herein.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed, for improvements and stabilization of markets and for an educational campaign advertising the food value of dairy products.

### BASIC PRICE

November

F. O. B. Philadelphia

Grade B Market Milk

Test	Per cent	Price
3.20	3.20	7.1
3.21	3.21	7.15
3.22	3.22	7.2
3.23	3.23	7.25
3.24	3.24	7.3
3.25	3.25	7.35
3.26	3.26	7.4
3.27	3.27	7.45
3.28	3.28	7.5
3.29	3.29	7.55
3.30	3.30	7.6
3.31	3.31	7.65
3.32	3.32	7.7
3.33	3.33	7.75
3.34	3.34	7.8
3.35	3.35	7.85
3.36	3.36	7.9
3.37	3.37	7.95
3.38	3.38	8.0
3.39	3.39	8.05
3.40	3.40	8.1
3.41	3.41	8.15
3.42	3.42	8.2
3.43	3.43	8.25
3.44	3.44	8.3
3.45	3.45	8.35
3.46	3.46	8.4
3.47	3.47	8.45
3.48	3.48	8.5
3.49	3.49	8.55
3.50	3.50	8.6
3.51	3.51	8.65
3.52	3.52	8.7
3.53	3.53	8.75
3.54	3.54	8.8
3.55	3.55	8.85
3.56	3.56	8.9
3.57	3.57	8.95
3.58	3.58	9.0
3.59	3.59	9.05
3.60	3.60	9.1

When milk is not tested the price f. o. b. Philadelphia is 8 cents per quart.

### MONTHLY BASIC PRICES OF GRADE B OR MARKET MILK

3 per cent butter fat content

Month	F.O.B. Phila	station 50 mile	quarts zone per cwt
1927			
April	7.1	2.71	7.1
May	7.1	2.71	7.1
June	7.1	2.71	7.1
July	7.1	2.71	7.1
August	7.1	2.71	7.1
September	7.1	2.71	7.1
October	7.1	2.71	7.1
November	7.1	2.71	7.1
December	7.1	2.71	7.1
1928			
January	7.1	2.71	7.1
February	7.1	2.71	7.1
March	7.1	2.71	7.1
April	7.1	2.71	7.1
May	7.1	2.71	7.1
June	7.1	2.71	7.1
July	7.1	2.71	7.1
August	7.1	2.71	7.1
September	7.1	2.71	7.1
October	7.1	2.71	7.1
November	7.1	2.71	7.1
December	7.1	2.71	7.1

### NOVEMBER BUTTER PRICES

92 Score, Solid Pack

	Philadelphia	New York	Chicago
1	50	49	47½
2	50	49	47½
3	50½	49½	47½
4	51	50	47½
5	51	50	48
6	51	50	48
7	51	50	48
8	51	50	48
9	51½	50½	48½
10	51½	50½	48½
11	51½	50½	48½
12	51½	50½	48½
13	51½	50½	48½
14	51½	50½	48½
15	51½	50½	48½
16	51½	50½	48½
17	51½	50½	48½
18	51½	50½	48½
19	51½	50½	48½
20	51½	50½	48½
21	51½	50½	48½
22	51½	50½	48½
23	51½	50½	48½
24	51½	50½	48½
25	51½	50½	48½
26	51½	50½	48½
27	51½	50½	48½
28	51½	50½	48½
29	51½	50½	48½
30	51½	50½	48½

Many farmers are putting ventilating systems in their dairy stables now, as fresh air of the right temperature is necessary for healthy stock.

### Cooperative Members

#### Meet at State College

The third annual Cooperative Conference at the Pennsylvania State College came to a close November 9 after an interesting two-day session devoted to the consideration of problems vitally affecting cooperative enterprises in the state.

The conference received the report of a committee appointed a year ago to draft amendments to the State Cooperative Act. W. S. Wise, Meadville, was chairman of the committee and other members were Charles H. Hays, North East; Robert F. Brinton, West Chester; John Arnold, Clearfield, and George Stuart, Harrisburg.

L. S. Hurbert, of the bureau of agricultural economics in the United States Department of Agriculture, addressed the conference on "Permanent Capital and Operating Funds" and "Some of the Legal Phases of Cooperatives."

Discussion of capital stock attracted considerable attention with Herbert C. Barker, West Chester; F. O. Kuhns, Wysox, and W. H. Hoffman, Glenville, telling why it is desirable and S. H. Manon, Marion; L. P. Satterthwaite, Newton, and L. M. Paschall, West Chester, explaining why it is undesirable.

J. K. Stern, of the college department of agricultural economics, presented the results of a survey of Pennsylvania cooperatives made during the past year, and E. L. Moffitt, farm management extension specialist, explained "The Relation of Cooperative Movement to Farm Management Problems." Roy F. Bergengren, Boston, Massachusetts, made an address on "Cooperative Credit Unions."

### Inter-State Milk Producers' Association

Incorporated  
Flint Building, 219 N. Broad St., Philadelphia, Pa.

Representing over 21,000 Dairy Farmers in the Philadelphia Milk Shed.

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### Eastern States Farmers' Exchange

## IS IT SAFE TO SWITCH RATIONS?

A farmer once asked an eminent extension service feeding authority if he thought the belief sound that it is dangerous to switch from one manufactured ration to another. The authority replied that it all depends on the rations involved and in the way the switch is made. He went on the show that if grain rations are composed of quality ingredients appealing to the taste of the stock for which they are intended and are mixed in the right proportion, it is safe to go from one to the other merely blending the two for a time to eliminate the slight danger of throwing the animals or birds off their feed by the change.

Asked how fast the change should be made, he said, "If you are switching from a superior to an inferior mixture, the slower the better—take as long as you possibly can. If you switch from an inferior to a superior mixture, the quicker you effect the complete change the better—a day or two at most."

Eastern States feeds are composed entirely of top quality ingredients which are extremely palatable to the stock for which the mixtures are blended. The proportion of ingredients in each mixture is determined by feed authorities in the states served by the Eastern States Farmers' Exchange, the men trained by education and experience on this technical subject who are devoting their entire time to serving the interests of feeders in their respective states. Such feeds can be turned to with safety and profit, and scores of dairymen and poultrymen are switching to Eastern States rations every month and are proving on their several farms that it pays to do so.

No farm is too small and none too large to benefit from Eastern States service. If you also are thinking of trying the service which thousands are endorsing with their patronage, write the office.

### Eastern States Farmers' Exchange

A non-stock, non-profit organization, owned and controlled by the farmers it serves

HEADQUARTERS

SPRINGFIELD, MASSACHUSETTS



## OUR TWELFTH YEAR

By H. D. ALLEBACH, President

INTER-STATE MILK PRODUCERS' ASSOCIATION, Inc.

(Continued from page 1)

every farmer and every milk plant would have a permanent Dairy Council permit, there were many who said that it could not be done or that it would take ten years to effect the changes which were included in the regulations adopted. On June 1st, 1928, all milk producers supplying our co-operating dealers had permanent permits and the dealers' plants had also been approved. This is a unique accomplishment and, to the best of my knowledge, it has not been successfully carried out anywhere else in the world. It is receiving recognition as an example of what can be done through co-operation.

### Production Control

Among the subjects discussed at the last Institute of Cooperation there was none that was recognized as of more importance to the successful operation of a co-operative than that of production control. As representative of organization after organization presented its plans, problems and accomplishments to the Institute, it was evident that the cause of many discouraging embarrassments and partial or complete failures in the co-operative movement has been that of inability to keep the supply of the product in line with the market needs. This was true of the organized producers of special crops, such as are grown in California, or the more general farm products. Examples can be pointed out within the dairy groups themselves. Therefore all were vitally interested in efforts of the "Inter-State" and other units of the National Cooperative Milk Producers' Federation to relate production to demand through such arrangements as our own Philadelphia Selling Plan.

### Philadelphia Selling Plan

This plan was adopted in 1919. Changes in this plan have been made in order to meet the market needs for fluid milk within our territory. We have thus far held to the production made in October, November and December as a basis of working out our plan. Last year we took the average of two years production to get the basic amount for 1928 sales. This year we are adding another year, taking the average of three years. This plan has been explained in the "Review" and at practically all our meetings. For 1929 we will use the basic amount on which you were paid during 1927; the average production made in October, November and December of 1927; and the average production of October, November and December, 1928. The sum of these three figures divided by three will be your basic for 1929 sales. This plan we believe is a fair one both to the producer and the buyer. It prevents anyone from increasing his herd so far as to break the market in any one

Our average surplus price for four per cent milk for 1928 was \$2.783. This represents an increase over 1927 of \$0.053 per hundred pounds. This increase reflects the more favorable conditions in the butter market.

### Average Weighted Price

On page 8 you will find a table which presents the price in effect month by month, during 1928, on all classes of milk. This shows us that the average weighted price for "B" milk F. O. B. Philadelphia for the entire year is \$3.569. At present we are selling within the Philadelphia Milk Shed as "A" and "AA" milk, about 30 per cent of all milk produced. It is hard to get exact data as to just how much bonus is paid for this class of milk but we feel safe in stating that we could add at least \$1.5 per hundred pounds to our weighted average price to cover such bonuses, making our estimated weighted average price amount to \$3.719 per hundred pounds.

This price, as I am quoting it, is the price that is net to the producer but in order to bring it up to the price figured on in other markets we should add to this \$.02 per hundred pounds paid by members to the Association as commission and \$.01 per hundred pounds paid to the educational fund of the Philadelphia Inter-State Dairy Council. This would give us a gross price of \$3.749 for milk testing four per cent.

### Production

Our production during 1928 has been somewhat greater than that of 1927 and 1926. And this has been due in the face of a rising cost of cattle. Many thousand cattle have been taken out of our territory on account of reaction to the tuberculin test. Your association has handled, during the past fiscal year 798,368,228 pounds of milk. The amount of money paid our members computed on a weighted "B" price was \$28,493,762.06 or \$2,915,513.78 in excess of that returned to them in 1927.

### Where Our Milk Comes From

In my report last year I dwelt at some length on the remarkable changes in the seasonal variation of production which has been accomplished through the operation of the Philadelphia Selling Plan. These changes were illustrated by charts which I believe proved interesting to our members. A chart which we have prepared this year is designed to illustrate to you the extent and nature of the territory in which the Inter-State plan operates and from which our supply of milk is drawn.

THE FOLLOWING TABLE PRESENTS IN DETAIL THE PRICES IN EFFECT, MONTH BY MONTH, DURING 1928 ON THE VARIOUS CLASSES OF MILK:

Table I

MILK PRICES—PER 100 LBS.—4% B. F.

Fiscal Year Ending October 31, 1928

SOURCE:—PRICE LISTS ISSUED BY INTER-STATE MILK PRODUCERS' ASSOCIATION, INC.

DATE OF ISSUE	PERIOD TO WHICH APPLICABLE	BASIC PRICES		PERIOD TO WHICH APPLICABLE	SURPLUS PRICES			
		F. O. B. PHILA.	F. O. B. 51-60 MI.		FIRST SURPLUS		SECOND SURPLUS	
					F. O. B. PHILA.	F. O. B. REC. STA.	F. O. B. PHILA.	F. O. B. REC. STA.
Oct. 28, 1927	Nov., 1927	\$3.69	\$3.11	.....	.....	.....	.....	.....
Nov. 29, 1927	Dec., 1927	3.69	3.11	Nov., 1927	\$2.91	\$2.34	(a)	(a)
Dec. 28, 1927	Jan., 1928	3.69	3.11	Dec., 1927	3.03	2.46	(a)	(a)
Jan. 28, 1928	Feb., 1928	3.69	3.11	Jan., 1928	2.92	2.34	\$2.52	\$1.94
Feb. 28, 1928	Mar., 1928	3.69	3.11	Feb., 1928	2.78	2.21	2.41	1.83
Mar. 28, 1928	Apr., 1928	3.69	3.11	Mar., 1928	2.93	2.35	2.53	1.96
Apr. 28, 1928	May, 1928	3.69	3.11	Apr., 1928	2.75	2.17	2.38	1.80
May 28, 1928	Jun., 1928	3.69	3.11	May, 1928	2.71	2.13	2.35	1.77
Jun. 28, 1928	Jul., 1928	3.69	3.11	Jun., 1928	2.66	2.09	2.31	1.73
Jul. 28, 1928	Aug., 1928	3.69	3.11	Jul., 1928	2.70	2.12	(a)	(a)
Aug. 28, 1928	Sep., 1928	3.69	3.11	Aug., 1928	2.78	2.20	(a)	(a)
Sep. 28, 1928	Oct., 1928	3.69	3.11	Sep., 1928	2.88	2.31	(a)	(a)
Oct. 29, 1928	.....	.....	.....	Oct., 1928	2.85	2.26	(a)	(a)

NOTE:—(a)—No Second Surplus Prices in effect in months of July, August, September, October, November and December.

year, yet it also prevents anyone from establishing an abnormally low basic through disadvantageous conditions in any one year. Special arrangements have been made covering all producers, having had on an initial test for their herds for tuberculosis during 1927-1928.

### Basic Milk Price

When your association was first organized, little did we realize that the price of milk, for the basic amount would be maintained at one level during all seasons as has been the case for the past two years. The price for basic milk to our members is \$3.69 per hundred pounds for four percent milk F.O.B. Philadelphia. This price was agreed upon on September 16, 1926, and has not been changed since that time.

The price of basic milk at receiving stations in the 51-60 mile zone is \$3.11 per hundred pounds for four percent milk, being subject as heretofore to a deduction of \$.5755 per hundred pounds from the F. O. B. Philadelphia price, to cover freight and station operating charges. (See Table above)

### Surplus Prices

This is the second fiscal year that surplus prices have been paid throughout the twelve months. It was found necessary because of the apparent desire of the producer to increase his production during the three last months of the year, the production of which is used to help establish the basic amount for the following year. By using the surplus price during the entire twelve months we believe that we are again establishing a more nearly uniform production than we have had in the last two or three years.

The chart (see page 1) presents in map form the states of Pennsylvania, New Jersey, Delaware, Maryland, West Virginia and Virginia. Around Philadelphia, as the chief market in the Inter-State territory, mileage zones have been traced, indicating as nearly as possible the divisions in our territory according to the price zones in which the various country plants are located. No effort should be made to interpret these zone lines as depicting actual mileages from Philadelphia. They are rather price zones determined by freight rates necessary to transport to Philadelphia milk delivered to plants in these various zones. Some secondary markets, such as Trenton, N. J., Wilmington, Del., Reading, Pa., and Altoona, Pa., are shown together with secondary lines roughly outlining the production areas delivering to these markets.

Our members will be interested in locating their respective home areas on this chart and comparing these with the remainder of the Inter-State territory. I would like especially to call your attention to the relatively heavy volume of milk still produced within the limits accessible to direct delivery to F. O. B. Philadelphia market points.

Reference to Table III, (see page 8) reveals that practically 53% (52.9) of the total production of milk on the Inter-State plan is produced within a 60 mile radius of Philadelphia. The inclusion of the next ten mile zone brings the production so situated roughly up to 60% (59.6) of the entire Inter-State supply.

Table III presents in detail, zone by zone, data covering the fiscal year ending October 31, 1928. This table in connection with the chart will enable each member here today to study for himself not only his local areas but the Inter-State territory as a whole. Such study should not fail to impress each one with the fact that

(Continued on page 8)

## Pennsylvania State Farm Products Show to be Largest in History

One hundred and fifty thousand square feet of floor space, 30,000 more than in any previous year, are under contract for the Pennsylvania State Farm Products Show to be held in Harrisburg, January 22, 23, 24, and 25.

These greatly enlarged housing facilities will make it possible to provide the most attractive and best arranged winter farm exhibition that has ever been held in the Commonwealth, according to the Show management.

Several new features including a display of vegetables and a home economics department will be seen in this—the thirteenth annual show, and plans have been made to enlarge all former departments.

### Extensive Dairy Display

This year for the first time the displays of milk and butter, dairy cattle, dairy equipment and dairy supplies will be combined in a joint exhibit, to be located in the Shaffer Building, 60-80 South Cameron street. Because of inadequate floor space in the past, it was necessary to separate these features, making each less effective. A portion of the DeSota Building, near the Shaffer Building, may also be used this year for the judging and sale of dairy cattle.

The horticultural, potato, vegetable, corn and small grains exhibits along with the educational displays of the Pennsylvania State College and the Departments of the State Government will be located in the Shaffer Building where ample accommodations are available.

The poultry show, with double the floor space of a year ago, will be staged in the Vance Building (Down Town Garage) at Fourth and Chestnut Streets. Outstanding features of this Show will be the displays arranged by the Ancona, Cornish and Rhode Island Red State breed meets.

Only two floors of the Publications Building (Emerson-Bartingham) will be used for show purposes this year. The first floor will house the heavy line of farm implements and machinery while the second floor will contain the egg, tobacco, apiary, maple products, home economics and electrical displays.

The livestock exhibits will also be conveniently and adequately provided for. The baby beef entries, numbering approximately 100, will be housed in the Federal Truck Building at 45 North Cameron Street, with the show and sales ring along with the swine show on the first floor of the Inez Building at 38 North Cameron Street. The second floor of the Inez Building will be used for the wool and lamb show.

## South Jersey Guernsey Club Hold Annual Banquet

Some two hundred members and guests of the South Jersey Guernsey Club participated in its second annual banquet, held in Salem, N. J., on Thursday, November 8th. There was an outstanding representation of breeders of the Guernsey cow throughout the southern section of the state.

William H. Chew was toastmaster and addresses were made by William N. Nulton, secretary of the Club; M. M. Hollingsworth, secretary of the National Guernsey Breeders' Association; R. G. Connelly of the New Jersey State Extension Service; M. T. Phillips of Pomeroy, Penn., and Judge John B. Kates of Camden County, N. J.

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## Jersey Breeders Will Tattoo Dairy Animals in Future

To establish a uniform method of identification for Jersey cattle the members of the American Jersey Cattle Club this year adopted a By-Law which requires that all animals to be registered after January 1, 1929, must be tattooed. The Article covering this reads as follows:

"ELIGIBILITY—1. No animal shall be registered until both its sire and dam are registered; and, to preserve the identity of registered animals, all animals offered for registration must be plainly tattooed in the ear in indelible ink with such letters and numbers as the owner may select, no two animals (in the same herd) to have the same number. Both ears may be used, and the marks and numbers in the ears

must be stated on applications for registration.

The above requirement as to tattooing shall go into effect on January 1, 1929."

Many dairy animals are solid color and in many herds only the owner can definitely identify all such animals. With the tattoo mark recorded in the owner's records and on the Certificates of Registration of purebred animals anyone can identify every animal in the herd. In the event of the owner's death or absence this information is of the greatest value.

It takes but a few moments to tattoo an animal and the identifying mark is

permanently fixed in the ear. Needle points form the design of letters or numbers and these points are held in position in the head of the marker which is like a pair of pliers. The needle points are covered with indelible ink or paste. The instrument is then set in position and the needles penetrate the ear on the inside carrying the ink well under the surface of the skin. Ink is immediately rubbed into the slight wound made by the needle points and the job is done. There is practically no bleeding, and the operation is scarcely noticed by the animal. It is recommended that the ear to be tattooed be cleaned with alcohol before it is punctured.



## OUR TWELFTH YEAR

By H. D. ALLEBACH, President

INTER-STATE MILK PRODUCERS' ASSOCIATION, Inc.

(Continued from page 6)

individually and mutually we are all engaged in an industry of considerable magnitude.

Supplementing the data on volume of milk originating in each mileage zone, Table IV shown on page 16 presents the volume and percent of production in each of the states in which the Inter-State operates.

If we arrange this data by volume of supply from each state we find that Pennsylvania leads with 65.4%, Maryland is second with 14.1%, New Jersey is third with 11.5%, Delaware is fourth with 8.4% and a very small amount 0.6% is drawn from West Virginia. It should be noted in addition a trifle also comes from Virginia. This however, is delivered to a Maryland receiving plant and it was not practicable to list it separately.

### Demand For Milk

The increase in demand for milk in the early part of the year was not as great as we would have liked to see it. This was caused in part by the unfavorable labor situation within our markets. We believe that this has improved considerably.

### Butter Situation

We find that the holdings of butter in cold storage, November 1, 1927, were a little above the five-year average but slightly under holdings of 1926. On November 1, 1928, the holdings of butter were below the five-year average and also considerably below the figures of one year previously.

In the "Inter-State" territory there is each year a smaller proportion of milk going into manufactured products such as butter and condensed milk. But our price is at all times, directly affected by the price for such products in the world markets. The surplus price is based directly on the price of 92 score butter solid

### MILK PRICES—PER 100 LBS.—4% BUTTER FAT

F. O. B. PHILADELPHIA, PENNSYLVANIA

Fiscal Year Ending October 31, 1928

INTER-STATE MILK PRODUCERS ASSOCIATION, INC.

Table II

MONTH	CLASS I	CLASS II	CLASS III	AVERAGE PRICE ALL MILK (a)
	BASIC PRICE	I SURPLUS PRICE	II SURPLUS PRICE	
November.....	\$3.69	\$2.91	(c)	\$3.616
December.....	3.69	3.03	(c)	3.619
January.....	3.69	2.92	\$2.52	3.623
February.....	3.69	2.78	2.41	3.619
March.....	3.69	2.93	2.53	3.597
April.....	3.69	2.75	2.38	3.576
May.....	3.69	2.71	2.35	3.487
June.....	3.69	2.66	2.31	3.465
July.....	3.69	2.70	(c)	3.530
August.....	3.69	2.78	(c)	3.550
September.....	3.69	2.88	(c)	3.584
October.....	3.69	2.83	(c)	3.587
Weighted Averages for the year (b)	3.690	2.799	2.356	3.569

NOTE:—

- (a) Weighted by Quantities, Sold at Basic, I Surplus, II Surplus Prices.  
(b) Weighted by Quantities sold each month.  
(c) If Surplus Prices do not apply in months so designated.

packed in New York. Our basic price must also bear a definite relationship to the price of all dairy products in this and other markets.

We are therefore directly interested in the effect of the tariff on the price of dairy products.

### Tariff

It was largely due to the united effort of the organized milk producers of America, through their national organization, the National Co-operative Milk Producers' Federation, aided and supported by representatives of the Inter-State Milk Producers' Association and other units that in 1921 the tariff on butter was raised to eight cents (\$.08). It was generally recognized that the dairy industry, because not on a largely exporting basis, was a branch of agriculture which could be placed more nearly on a par with other industry through the operation of a protective tariff. At this time we want to publicly express the debt which our producers owe to the National Co-operative Milk Producers' Federation and its officers.

Later it was found that to make the protection of the American dairy farmer effective the \$.08 tariff was not sufficiently high to overcome the low costs of producing dairy products abroad and the low water transportation costs on such products to the United States. Appeal was made to the Federal Tariff Commission. As a result of this appeal the President authorized on April 1, 1926, that the tariff on butter be raised to \$.12. The effect of this action is evidenced by the consistent margin between the New York butter price and the London butter price of approximately \$.09 per pound in favor of the New York market throughout the past year.

We hope that Congress, in the very near future, will recognize the importance of reviewing the whole agricultural tariff situation in accordance with the urgent request of our dairy and other co-operative groups made during the last session of Congress. The dairy interests need an adequate adjustment of the tariffs on all dairy products and on such other products as come in direct competition with dairy products. We hope that Congress will go far enough, after carefully canvassing the whole situation, to give adequate tariff protection on all agricultural pro-

ducts where it is evident that such increases will aid in re-establishing agriculture on an equality with other industries.

### Activities in 1928

You have listened to a number of reports from various departments of your organization. May I briefly refer to them?

### Finances

You will note from the report of the Auditors, read by our Treasurer, Robt. F. Brinton, that the association has kept its expenditures well within its income throughout the year. A budget which was approved by the Board of Directors a year ago has been carefully adhered to by each department and reports have been made to the Board of Directors each month throughout the year of the actual financial standing of the association.

We are accumulating sufficient reserves to take care of the outstanding capital stock of the association. Your Board of Directors has adopted for next year, after careful survey by your officers, a somewhat revised outline of budgetary control. This is made necessary to bring the budget more in line with the organization's present activities. Your Board will have submitted to it for approval as usual, a new budget showing the amounts which are to be expended by each department. The Board will, through a financial statement each month, carefully check the operation of the budget.

TABLE III  
VOLUME OF MILK SOLD ON INTER-STATE PLAN  
Year Ending October 31, 1928  
BY PRICE ZONES IN WHICH DELIVERED

PRICE ZONE	TOTAL POUNDS DELIVERED IN ZONE	CLASSIFICATION OF ZONE TOTAL		PERCENT OF TOTAL	
		PER CENT BASIC	PER CENT SURPLUS	ZONE	ACCUMU- LATED
F. O. B. Philadelphia	125,838,800	90.56	9.44%	15.8	15.8
" Sub. Phila.	37,028,318	86.92	13.08	4.6	20.4
" 21- 30 Miles	28,350,056	89.77	10.23	3.6	24.0
" 31- 40 "	35,319,810	92.79	7.21	4.4	24.8
" 41- 50 "	64,116,952	90.08	9.92	8.0	36.4
" 51- 60 "	131,307,623	88.50	11.50	16.5	52.9
" 61- 70 "	53,498,655	87.79	12.21	6.7	59.6
" 71- 80 "	40,956,290	86.38	13.62	5.1	64.7
" 81- 90 "	18,697,784	88.13	11.87	2.3	67.0
" 91-100 "	42,489,157	80.36	19.64	5.3	72.3
" 101-110 "	7,855,943	80.59	19.41	1.0	73.3
" 111-120 "	7,592,482	79.74	20.26	1.0	74.3
" 121-130 "	12,063,344	88.54	11.46	1.5	75.8
" 131-140 "	27,439,916	82.99	17.01	3.4	79.2
" 141-150 "	7,808,041	88.15	11.85	1.0	80.2
" 151-160 "	9,668,239	85.71	14.29	1.2	81.4
" 161-170 "	19,296,560	87.46	12.54	2.4	83.8
" 171-180 "	None	.....	.....	.....	85.8
" 181-190 "	44,517,012	79.75	20.25	5.6	89.4
" 191-200 "	18,354,486	83.85	16.15	2.3	91.7
" 201-210 "	12,111,246	83.63	16.37	1.5	93.2
" 211-220 "	None	.....	.....	.....	93.2
" 221-230 "	None	.....	.....	.....	93.2
" 231-240 "	5,237,296	83.02	16.98	0.7	93.9
" 241-250 "	None	.....	.....	.....	93.9
" 251-260 "	None	.....	.....	.....	93.9
" 261-270 "	43,731,115	83.37	16.63	5.5	99.4
" 271 and over	5,089,013	78.64	21.36	0.6	100.0
Total all zones	798,368,228	*86.81	13.19	.....	100.00

\* Weighted average total volume.

### Organization

During the past fiscal year 1030 dairymen have been added to our membership. In the twelve years of our activities we have issued 25,968 stock certificates. This does not mean that we have that many active members. In order to keep up our active membership list we must be adding new members all the time.

### Milk Producers' Review

The Inter-State Milk Producers' Review has been going to the homes of our members for nearly nine years, bringing to them each month detailed statements

(Continued on page 16)

## TWELFTH ANNUAL MEETING Inter-State Milk Producers' Association, Inc.

(Continued from page 1)

### Tellers of Directors Election

Claude Wingerd, Franklin County, Pa., Chairman  
James H. Carter, Queen Annes County, Md.  
H. B. Derrick, Kent County, Md.  
Wm. Moore, Washington County, Md.  
Ross Ulrich, Lancaster County, Pa.

### Resolutions Committee

D. A. Croshaw, Burlington County, N. J.  
Geo. B. Irwin, Huntingdon County, Pa.  
John Houston, Sussex County, Del.

The annual report of the Secretary of the Association was made by Robert W. Balderston while the formal report of the association's financial condition, of November 1st, 1928, and as prepared by McGee, Fleisher & Co., certified Public Accountants, was presented by the treasurer, Robert F. Brinton.

A record of this report is on file in the offices of the Association and may be inspected by any member of the Association.

The report of the committee on nominations to fill eight vacancies on the Board of Directors of the Association to serve for the next three years was as follows:

C. C. Tallman, Burlington Co., N. J.  
H. B. Stewart, Huntingdon Co., Pa.  
John Carvel Sutton, Kent Co., Md.  
S. U. Troutman, Bedford Co., Pa.  
J. W. Keith, Queen Annes Co., Md.  
W. A. Woods, Cumberland Co., Pa.  
A. B. Waddington, Salem Co., N. J.  
H. I. Lauver, Juniata Co., Pa.  
E. Nelson James, Cecil Co., Md.

There were no nominations from the floor.

Following the circulation of the ballot the tellers committee announced the election of the following directors.

C. C. Tallman, New Jersey  
H. B. Stewart, Pennsylvania  
John Carvel Sutton, Maryland  
S. U. Troutman, Pennsylvania  
J. W. Keith, Maryland  
A. B. Waddington, New Jersey  
H. I. Lauver, Pennsylvania  
E. Nelson James, Maryland

A formal report of the year's work by the Field and Test Department was made by Frank M. Twining, Director. (Report printed elsewhere in this issue of the Milk Producers' Review.)

The session was then thrown open for general discussion and various problems of the Association's business were discussed. Among those considered were various phases of the Philadelphia Selling Plan; Check testing and milk weighing problems and methods; the tuberculin testing of dairy herds; general milk marketing conditions; bovine infectious abortion in cattle and other pertinent problems. All these policies and programs of the association in connection with the various matters discussed were approved.

The morning session closed with an address by Dr. Ollie E. Reed, Chief, Bureau of Dairying, United States Department of Agriculture, Washington, D. C. The subject of this address was, "The Dairy Industry of the United States."

### Thursday Afternoon Session

The afternoon session opened with the annual report of H. D. Allebach, president of the association, who reviewed the work of the past year and outlined the organization's future plans and problems. (This address is printed in full in this issue of the "Milk Producers' Review.")

A report of the activities of the Philadelphia Inter-State Dairy Council for 1928 was presented by R. W. Balderston, Executive Secretary. (This report is printed in full in this issue of the Milk Producers' Review.)

A further informal discussion of organization policies followed and the following resolutions, presented by the Resolutions Committee were adopted.

### Resolutions

1. We urge the Federal Congress to give adequate assistance to the enlargement of the vocational, agricultural, education system.

2. (a) We urge immediate action by the Federal Congress to provide adequate import duties on dairy products and the various oils and fats that compete with dairy products; and we ask that products of this character coming in from the Philippine Islands bear the same rate of duty as products from other foreign countries.

(b) We believe the time has come when all farm groups should work together as closely as possible in matters concerning tariffs on all agricultural products. To that end we favor a careful study of the tariff problem in relation to agricultural products being made by a national committee representative of the major agricultural commodities and we urge the National Co-operative Milk Producers' Federation to lend its best efforts to that end. We further recommend the creation of a special tariff committee by the directors of the association to assist the National Federation in efforts to carry out the undertaking.

3. We urge Congress to amend the intermediate credit act so that the intermediate credit bank may make direct, long time loans to cooperators on the security of their properties at a low rate of interest, such loans to be repayable on the amortization plan.

4. We urge the passage by the Federal Congress of the Haugen-Norbeck bill, enlarging the definition of oleomargarine.

5. We urge that all educational campaigns to enlarge the dairy industry be founded on careful surveys of the production conditions and market opportunities.

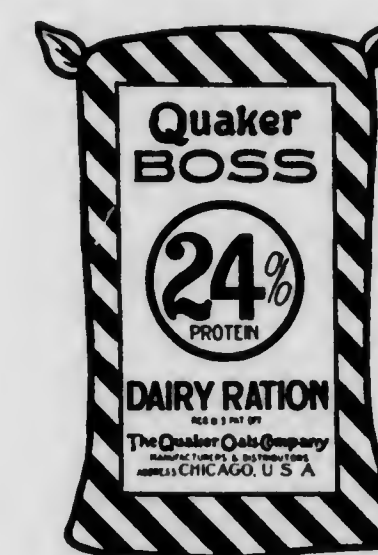
6. We view with alarm the tendency of dairy interests that conduct advertising campaigns, urging the consumption of one or more dairy products and at the same time by direct statement or by insinuation, endeavoring to hurt the sale of one or more other dairy products.

7. We wish to express our appreciation of the action of Congress in adequately supporting the tuberculin testing work of the several states, and we urge a continuance of the present program.

8. Appreciating the value to the dairy industry of the United States Government market information with respect to the production of dairy products and their distribution in the larger markets in the country, we urge:

BUY THE FEEDS IN STRIPED SACKS

# What do you want from your cows?



Essential minerals in just the right form and proportion—and molasses in dry form—are contained in this feed. Palatable, digestible, and profitable!

CONDITION in your herd? High milk yields? Dependable reproduction? A bankable surplus? PROFITS?

Whatever you want in your feeds, if your wants are fair, Quaker feeds will fully meet and fully satisfy those demands.

CONDITION—Fifteen of the best herds at the New York State Fair were fitted on Quaker feeds. Prize winners put in show shape. There is your answer. Quaker feeds produce and maintain beautiful condition.

PRODUCTION—S. D. Wicks of Syracuse, New York, heads the Cow Testing Association with his pure bred Jerseys by following the Quaker Way, feeding Quaker feeds. How can one do better?

REPRODUCTION—Follows good condition, good production, throughout the year.

PROFITS—Ask your feed dealer for prices on Quaker feeds, the dependable, productive quality feeds.

See the Quaker Dealer near you.

### Quaker Sugared Schumacher Feed

Just the feed for combining with Quaker (16%) or Quaker Big Q (20%), or Quaker Boss (24%), or any high protein concentrate. Sugared Schumacher is a choice feed for young or dry stock; an entire grain ration for horses, and a splendid fattening ration for steers, lambs and swine.

Made by THE QUAKER OATS COMPANY, Chicago, U.S.A.

BUY THE FEEDS IN STRIPED SACKS

(a) Extension of the service by the Bureau of Agricultural Economics, and particularly the extension of the information service with respect to movements of milk and cream into all metropolitan areas receiving substantial quantities of car-lot shipments of these products.

(b) We urge adequate appropriation to be made by the Congress to the Department of Agriculture for financing this additional service, and also for adequately financing technical dairy research conducted by the bureau of dairy industry.

Believing that efficient distribution is an important factor in securing an adequate return for the dairy farmer, we

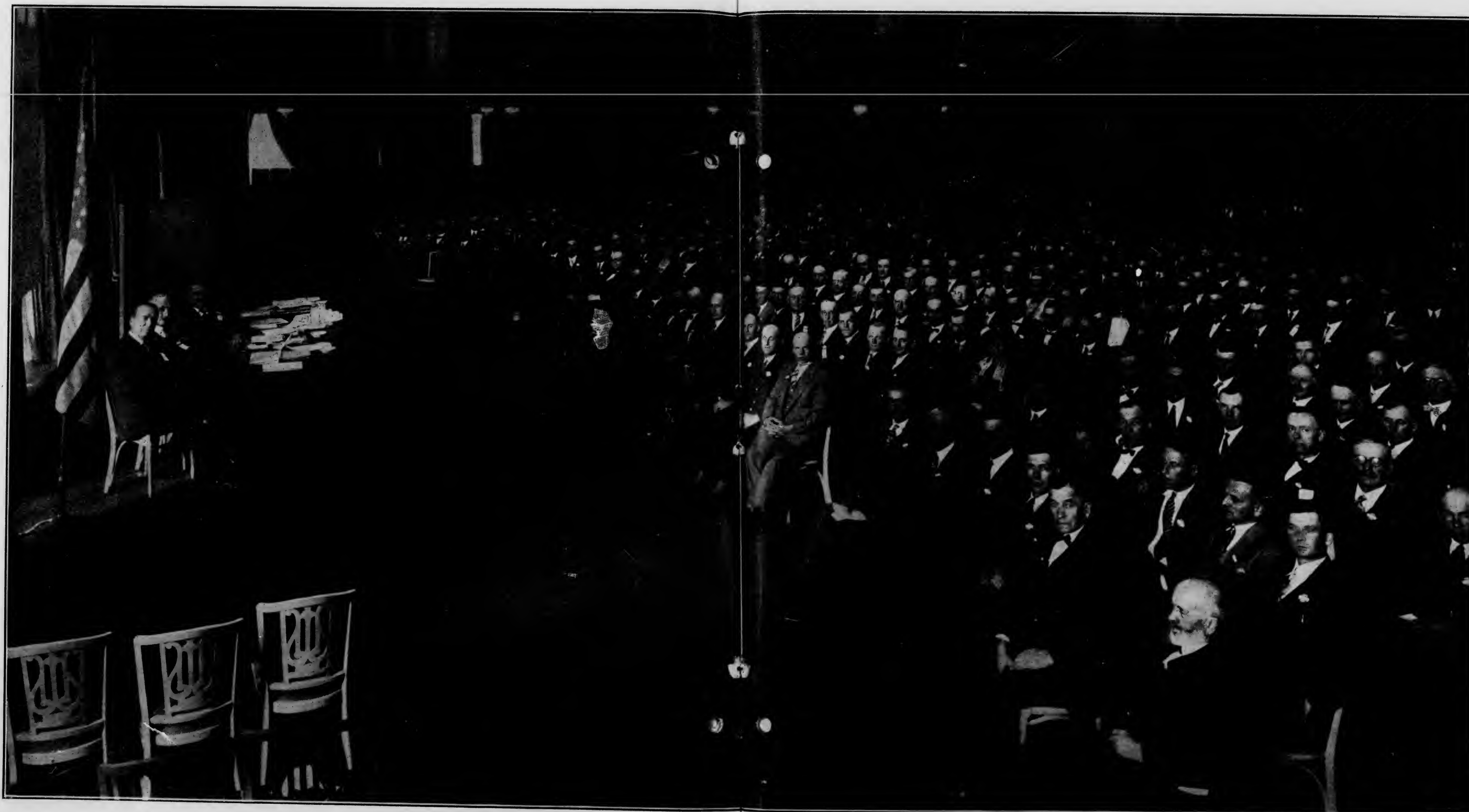
recommend that the bureau of Agricultural Economics of the United States Department of Agriculture, extend its research with respect to the milk industry so as to include an accurate analysis and a fair estimate of the cost of each step in the process of bringing the milk from the producer to the ultimate consumer.

9. Be it resolved that this Association go on record as being opposed to "Daylight Saving Time."

The afternoon session closed with an address by John A. McSparran, former Master of the Pennsylvania State Grange and a delegate from the southern Lancaster County Local of the Inter-

(Continued on page 17)





TWELFTH ANNUAL MEETING  
INTER-STATE MILK PRODUCERS' ASSOCIATION, INC.  
BENJAMIN FRANKLIN HOTEL, PHILADELPHIA  
NOVEMBER 22nd and 23rd, 1928



## DAIRY COUNCIL SERVICE

The various departments of the Dairy Council are at your service and will assist you in planning

### Educational Entertainment

for your Community, Local or Club Meeting.

The Dairy Council has carried the message of "Milk for Health" to hundreds of thousands of producers and consumers in the Philadelphia Milk Shed.

### Lectures and Speakers on Health Programs ARE AVAILABLE

Motion Picture Films on Dairy Subjects  
Lantern Slides Literature  
Posters

Short Plays for the Children, etc.

ARE YOURS FOR THE ASKING

Write us for detailed information and programs

Let Us Assist in Planning Your Entertainment

## Philadelphia Inter-State Dairy Council

R. W. BALDERSTON, Secretary

FLINT BUILDING

219 North Broad Street

Philadelphia, Pa.

### REPORT OF FIELD AND TEST DEPARTMENT

(Continued from page 3)

By performing, himself, part of the work and so demonstrating a truly co-operative principle, the dairyman not only cuts down the cost of weeding out and building up his herd, but he also has opportunity to learn at first hand, intimate knowledge of his herd. It has been our observation that this stimulates the interest of the dairymen in the herd improvement work.

It is our hope that a much larger proportion of our members will find it desirable to engage in some form of herd improvement work, either through a regular cow testing association or under some modified plan.

It will be by the regular weeding out of boarder cows, by lowering costs, which comes with higher, more efficient production and by replacing our herds with young stock from known producers that our territory will reach a par with the best dairy areas and thus be in a position to meet competition from any other dairy section.

#### PLANS FOR 1929

We do not contemplate any radical

change of our service in our program for 1929, but rather an extension, as far as possible, in our present program.

Our chief attention will again be directed to our regular services:

1. Check Testing.
2. Membership Problems.
3. Securing New Members.
4. Keeping Accurate Record of Membership Changes.

Our special services will again be directed to the solution of such problems as:

1. Prevention of Waste in Milk Transportation.
2. Making Special Test Investigations.
3. Making of Short Time Herd Tests for Members, to Compare Tests at Farms with those at Buyers' Plants.
4. Development of Long Time Herd Improvement Work along lines that will be attractive to a greater number of Inter-State Milk Producers' Association Members.

## EASTERN SHORE OF MARYLAND HOLDS SERIES OF DAIRY MEETINGS

A series of educational meetings have recently been, held in various sections of the Eastern Shore of Maryland at which a number of important problems affecting the dairy industry of the entire Shore were presented and discussed.

Dairying in the Eastern Shore has, in the past, been considered somewhat in the nature of a sideline, in that great grain and truck farming district. Fifteen years ago little market milk was produced. Today dairymen of that section produced annually 15 per cent of the milk consumed in the great Philadelphia market and this percentage is increased to 25 per cent when the milk produced by the dairymen in the State of Delaware section is included.

Farmers of the Del-Mar-Va Peninsula received over \$4,000,000 in 1927, for the products of the dairy cow in that section and demonstrates to what extent the dairy business of the section has been developed.

During the past few months definite efforts have been made to acquaint the dairymen of this district with the importance of the value of their product and aid them in the production of a product of good marketable quality. An extensive series of meetings was planned and held under the direction of the Inter-State Milk Producers' Association, the Philadelphia Inter-State Dairy Council and the Extension Service of the University of Maryland. Meetings were held at Easton, Kennedyville, Chestertown, Centerville, Queen Annes, Hurluck, Cambridge, Sudlersville, and a number of other points, where the problems of better dairying methods were discussed. At all of these meetings addresses were made by representatives of the various groups.

H. D. Allebach, president of Frederick Shangle, vice president or I. R. Zollers represented the Inter-State Milk Producers' Association. C. I. Cohee of the Quality Control Department of the Dairy Council represented that organization while J. H. Conover of the Dairy Extension Service represented the University of Maryland.

Representatives of the Inter-State Milk Producers' Association stressed the point of the necessity of producing, at all seasons of the year, a product that was high in quality and that that quality be maintained throughout the entire year. The consumer of your milk will not drink milk that is not of uniformly high grade. The buyer of your product is concerned because in the years past there has been much difficulty in obtaining a satisfactory milk supply from this district during certain seasons of the year. This has been due to the prevalence of the garlic flavor, and also to the lack of sufficient feed to properly supply the cattle during the winter period and also through the early spring months.

"Producers must learn to overcome this difficulty of garlic and other poor flavored milk if they are to maintain their present satisfactory milk market," said Mr. Allebach.

In studying this problem, Mr. C. I. Cohee, of the Quality Control Department of the Dairy Council said, "That several years investigations has resulted in the conclusion that the principal difficulty of the Eastern Shore milk pro-

ducer in operating his dairy was largely due to the lack of sufficient home grown feed."

"Many dairymen are handicapped in their dairy operations by not being permitted by their landlords to grow sufficient cow feed." Dairymen were cautioned by the speaker, "to investigate the possibilities of growing satisfactory hay crops and to plan for the erection of a silo on tenant farms, when such are leased, with a view of continued satisfactory dairy production."

A strong plea for better production and better methods was made by J. H. Conover, Maryland Dairy Extension specialist. He pointed out that "farmers on the Western Shore of Maryland grow on their farms an average of 1½ tons of hay per cow, horse or mule. Only one county on the Eastern Shore produced this amount of roughage. Many counties in this same section produced less than one ton of hay per animal and as a result many of these farms ran out of hay in the early spring and such farmers were forced to turn their cattle on pasture at a time when there was little else than garlic to be found on the fields."

"Growing a sufficient quantity of legume hay would do more to improve the quality of the milk produced than any other factor at this time."

"Comparisons with other dairy counties brought forth the fact that there was a woeful lack of silos in this section to provide sufficient feed for dairy cattle during the winter months. There are more than twice as many silos on the dairy farms in the Western Shore as there are on this Shore."

"The silo is the most economical building on the dairy farm. While 400 cubic feet of space is required to store a ton of hay, but 50 cubic feet is needed to store a ton of silage. Not only will the silo store feed economically but it also will produce a better feed for cows than corn fodder or corn fed separately as grain. Much of the waste that occurs in the storing and handling of the corn crop would be eliminated were the corn placed in the silo. Silage and legume hay with a proper selection of dairy feeds do much to keep the dairy cows in the best physical condition. 'Watch the back end of the cow and the front end will take care of itself,' said Mr. Conover. 'Legume hay, corn silage, corn cob meal, supplemented by a high grade of ready mixed feed or high protein feed will make the dairy cow a more efficient animal and this practice will lower the cost of producing milk.'

"Investigations have shown that cows fed on corn silage and alfalfa hay without any grain, have produced in many cases, as much milk as the Eastern Shore cows. This ration supplemented by a suitable grain mixture will tremendously increase the production per cow on the Eastern Shore farm. Every man with ten cows should have a silo," said Mr. Conover.

An ample supply of drinking water for the cattle, was also stressed by the speaker and that water should be of a suitable temperature. "Ice keeps milk in a refrigerator; ice, (in the cow) keeps milk in the cow; therefore see to it that the drinking water for the cows be of a such temperature as will not decrease production."

## Solid Carbon Dioxide A New Refrigerant With Interesting Possibilities But May be Harmful to Fresh Fruits and Vegetables

Solid carbon dioxide, which has a Fahrenheit temperature of 109 degrees to 114 degrees below zero, has long been known as a scientific curiosity, but as a result of better and cheaper methods of manufacturing, it has recently received much attention as a possible commercial refrigerant for railway cars, cold storage rooms and ship holds. A great deal has been published in the popular press to the effect that it is capable of working wonders in all lines of refrigeration.

Its great cooling power and its freedom from drip are interesting and attractive features but the fact seems to be overlooked, says Dr. Charles Brooks of the Bureau of Plant Industry, United States Department of Agriculture, that the carbon dioxide gas given off by the new refrigerant may under certain conditions be distinctly harmful to fresh fruits and vegetables.

"When removed from the parent plant or dug from the ground," says Doctor Brooks, "fruits and vegetables are still alive and remain alive during shipment and storage and as long as the fresh product is in a marketable condition. Like other living material, either plant or animal, they are carrying on respiration, taking up oxygen and giving off carbon dioxide and they cannot stand great and prolonged content of the surrounding air. It has been well established in botanical literature that continued exposure of peaches, pears, apples, strawberries or cranberries to high percentages of carbon dioxide will result in the development of objectionable flavors and it has been shown that certain storage troubles of apples and potatoes are the result of an accumulation of carbon dioxide and the displacement of oxygen. Heavy losses in overseas shipments of apples and pears have been found to be caused by an excessive accumulation of carbon dioxide in the hold of the ship."

"With these facts in mind it is evident that the use of the new refrigerant can not be considered as merely a problem in physics and refrigeration but, in so far as the shipment of living material is concerned, is largely a question of the tolerance of the particular fruit or vegetable to the accumulation of carbon dioxide in the storage air. This tolerance varies with the variety and maturity of the product and our present knowledge of the subject is far too meager to serve as a basis for commercial procedure. Under such conditions indiscriminate popularizing of the new refrigerant is timely and may have dangerous possibilities."

### Playing Safe

Rastus and his bride-to-be, Mandy, were on a shopping tour so they could feather their nest. When it came to a choice of bedroom suites the furniture salesman asked, "Do you want twin beds?"

Mandy looked at Rastus, then in an embarrassed voice said, "No, I think I am best to get an ordinary bed 'n' let de Lawd decide 'f it will be twins."

—Country Gentleman

### Second Best

"Well, sonny," asked the visitor, "did you get any prizes at the county meet?" "No'm," replied the lad, "but I got two horrible mentions."

## FARQUHAR "Non-Wrap" SPREADER

MAKES AN  
Even Distribution  
THEREBY

Producing Greatest Yield for the Farmer

EVEN DISTRIBUTION is possible only when beaters deliver an even stream to the distributor. The "Non-Wrap" Beaters of this spreader positively assure complete pulverization and regular, even feed no matter how heavy or light the application.

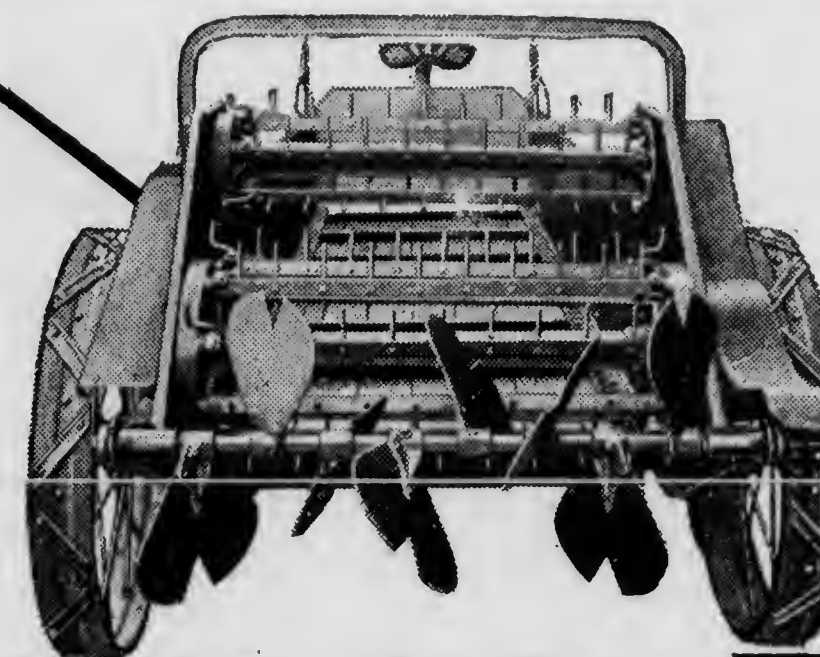
Uniformly increased fertility brings more money to the farmer. He spends less for labor, saves time, and hauls manure when it is most convenient, for no matter what kind or condition of the manure, the "Non-Wrap" makes an even distribution.

It is distinctly to your interest to know about the "Non-Wrap" Spreader. Write today for Big Bulletin.

A. B. FARQUHAR CO., Limited

Box 861

York, Pa.



### West Virginia Dairymen's Association

The Seventh Annual Meeting of the West Virginia Dairymen's Association, held in Martinsburg, West Virginia, November 8th and 9th, was marked by an interesting business session, an annual banquet and a day spent in inspection visits in the field.

The first day's session was given in part to routine business of the association together with addresses by H. O. Henderson, Head of the Dairy Department, West Virginia University; Dr. F. D. Fromme, Dean, West Virginia College of Agriculture and J. C. McDowell, United States Department of Agriculture.

At the annual banquet, which was held on the same evening, an address was made by H. D. Allebach, president of the Inter-State Milk Producers' Association.

Following this address, cups were awarded to 23 members of the association, whose dairy herds had exceeded an average yearly production of 300 pounds of butter fat.

The second day's session was held in the field. Visits were paid to various dairy farms, in Berkeley and Jefferson counties. Stops were made at an important apple canning plant, a community demonstration packing plant and at the plant of the Blair Limestone Company.

In connection with the two day's session there was also an interesting exhibit made of dairy equipment, farm machinery and general farm supplies.

### Boys Must Have Their Fun

The Vevay Fire Department was called at 2 o'clock. They hastened to the scene and aided wonderfully toward the further spread of the fire.

—Vevay (Ind.) Democrat.

### New Job for Garters

She—"According to the latest fashion notes, skirts are going to be worn below the knees."

He—"I don't doubt it, but how are they going to keep them on?"—Life.

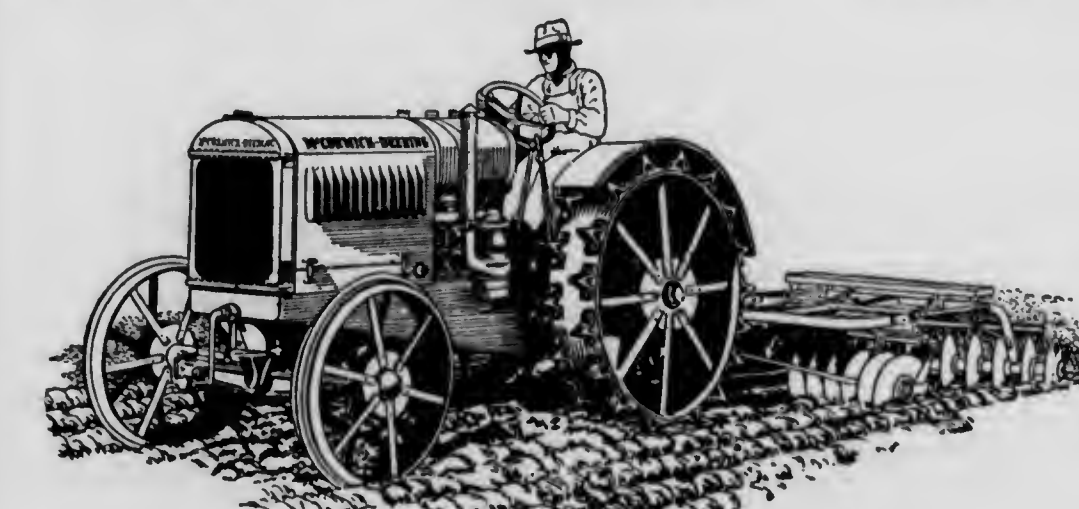
## OUR TIMES BY McCORMICK DEERING

Radio, television, airplanes, and talking movies are all important inventions of "Our Times" but to the farmer the invention of modern farm power in the form of McCormick-Deering's 10-20, 15-30, and Farm-all tractors are even more important. Would your grandfather ever have believed that you could plow from seven to ten acres, cultivate from fifteen to twenty acres, mow from twenty to twenty-five in a day? You can, with one of these tractors. And do a more thorough, quicker job than was ever possible with muscle power.

Find out just what "Our Times" means to the farmer by having one of these tractors demonstrated by the dealer nearest to you.

### The International Harvester Co. of America

PHILADELPHIA HARRISBURG BALTIMORE



A 10-20 DISKING

HAVE YOU READ THE  
ADVERTISEMENTS IN THIS ISSUE OF  
The Milk Producers Review?  
When you ask for prices, mention the fact that you saw the ad in this paper.





### Ladies Attending Annual Meeting Entertained

Upward of one hundred ladies gathered at the offices of the Inter-State Milk Producers' Association for their Annual Meeting on Thursday, November 22nd. In addition to the many old acquaintances there were several new members whom the Committee were especially glad to welcome.

The offices were in spic and span order for the meeting. They are much more roomy than the old quarters in the Boyertown Building and the conference room held the group very comfortably. For the first time it has been practicable to use the lantern for an illustrated talk.

The Chairman, Mrs. Brinton, called the meeting to order with a few words of cordial welcome.

A quartet of dairy maids sang, "Ole Cow Lady" much to the delight of every one present.

Then followed short talks by two of our members, Mrs. Robert Atkinson and Mrs. Charles Preston, on the use made of Dairy Council material in their neighborhoods. Mrs. Atkinson told how valuable the teachers found the posters and color cards in their health work, while Mrs. Preston had made use of speakers from the Council for P. T. A. and Farmers' Club meetings. Both speakers felt that the Dairy Council was a most valuable source for material when working up meeting programs.

Evelyn B. Spooner, of the Nutrition Department of the Dairy Council, gave an illustrated talk on "The Charm that Charms." She showed pictures of four ladies noted for their charm and personality—Mona Lisa, Countess of Devonshire, Martha Washington, and Mrs. Calvin Coolidge. Then she explained that this charm of personality comes through good health and showed that proper combinations of food make a satisfactory diet.

Mr. and Mrs. Allebach and Mr. and Mrs. Balderston have had unusual trips this summer—the Allebachs went to California, the Balderstons to England and the Continent. Mrs. Balderston described some of the customs associated with serving afternoon tea in England.

Dr. C. W. Larsen, Managing Director of the National Dairy Council, brought a greeting from that organization, explaining the value of the dairy industry and the channels through which the Council sent out its message of good health.

The final number on the program was a play "The Burglar in the House." It was written by Charles Sommers of the Dairy Council and put on by Concordville Grange. It is a detective story and the fact is very cleverly brought out that the family jewels which are supposed to have been stolen are the jewels of good health which every family can have.

#### Characters

Bill Dirk (a farmer) . . . Norman Cherry  
Martha Dirk (his wife) . . . Bertha Cherry  
Sally Dirk (their daughter) . . . L. Cherry  
Sam'l Beck (hired man) . . . E. Stellwagen  
James K. Holmes, M.D. (the village doctor) . . . Wesley Holmes

At the close of the meeting a delicious luncheon was served by the Nutrition Department. The menu is given in another column.

### Accuracy in Cooking

Good materials plus good recipes equal good food, says an old rule but it tells only half the story. The recipes must be read carefully and followed exactly because exact temperature and measurements are needed except by the expert cook who can use her judgment and her eye. By long experience she knows instinctively what changes in a recipe will improve it. Most cooks, however, find that care, not guesswork, pays.

Most cook books call for level measurements. This means the top of the measure should be smoothed off with a knife. When measuring flour, for example, it should be sifted and put into the cup lightly, not packed in. For accuracy, the standard half-pint measuring cup, either of glass, tin, or aluminum, marked in quarters, thirds or halves, is recommended.



A scene from "The Burglar in the House"

### "Glorifying the Cereal"

Cereals may appear for breakfast, lunch or dinner. Their popularity depends upon thorough cooking, for only then are they of a fine flavor and easily digested.

Have you ever tried cooking the children's cereal in milk? The same method is used in cooking with water, only milk replaces the water. It may entirely replace it or you may use half milk and half water. This is especially helpful, when one is having difficulty in getting the child to take his prescribed quart of milk a day.

#### Molded Cereals

Molded cereals served with fruit make an excellent supper dish for the younger members of the family.

Prepare an extra amount of breakfast cereal. This should not be stiff as it becomes firm when cold. Pour the cereal, when still warm, into small custard

### Dresses Exhibited on Makers

At the Delaware County Farm Products Show held at Concordville, Pa., November 20, 21, 22 a new class for sewing was offered in the Home Economics Department.

Dresses made from the foundation pattern used in the sewing centers were exhibited, worn by the makers. Miss Margaret Brown, clothing specialist from State College, judged them and explained to her audience the points on which she judged and her reasons for placing them. It was a very worthwhile exhibit.

Other entries in sewing included a cotton dress, slips, nightgowns and practical aprons. There were more garments exhibited than a year ago and the quality of the sewing was better this year than last.

### Menu Served at

#### Ladies' Luncheon

Creamed Oysters and Mushrooms  
Candied Sweet Potatoes and Pineapple  
Tomato, Carrot and Celery Aspic  
Salad with Cooked Dressing  
Cranberry Jelly  
Buttered Rolls  
Coffee or Cocoa

Ice Cream  
Cake  
Creamed Oysters and Mushrooms

1 c. thick white sauce  
2 c. oysters  
1 c. mushrooms

Clean and drain oysters. Steam mushrooms in butter for ten minutes. Add oysters and mushrooms to sauce. Season with salt and red pepper and cook, until edges of oysters curl. Add some liquid from mushrooms.

#### White Sauce

2 tbsp. butter 1 c. milk  
4 tbsp. flour ½ tsp. salt

Melt fat in top part of double boiler. Remove from fire. Add flour and salt. Stir until smooth then cut gradually with milk. Put back over water and cook until thick.

#### Candied Sweet Potatoes & Pineapple

Pare sweet potatoes and cut in thick slices, lengthwise of potatoes. On each slice place a small piece of pineapple, on top of this another slice of potato, making a sandwich. Place in a baking pan and pour over a syrup made of 2 cups of brown sugar to one of water. Bake until the potatoes are tender. Baste with the syrup as potatoes bake to keep top piece of potato moist.

Tomato, Celery and Carrot Aspic Salad  
1 envelope of gelatin 1 tsp. salt

1 c. cold water ½ c. chopped raw carrots  
2 c. boiling tomato juice ½ c. chopped celery  
1-16 tsp. red pepper ½ c. chopped onion

Soak gelatin in cold water for 5 minutes. Dissolve in boiling tomato juice. Have carrots, celery and onion in mold. Pour in liquid. Set in a cool place to jell.

#### Cooked Dressing

1 tsp. salt 1 egg  
½ tsp. mustard ¼ c. milk  
1 tsp. flour ¼ c. vinegar  
1 tsp. sugar 2 tbsp. butter

Mix dry ingredients, add slightly beaten egg and milk. Cook in double boiler until thick and smooth, stirring constantly. Add butter and vinegar slowly and cook until of desired thickness. Whipped cream may be added for fruit salad.

#### Cranberry Jelly

½ as much sugar as cranberries  
¼ as much water as sugar  
Pick over cranberries, add water and cook until berries pop open. For clear jelly, force berries through a sieve. Add sugar and cook until sugar is dissolved. Pour in molds. For jellied sauce, do not force berries through sieve but merely add sugar and cook until it dissolves. Pour out. It will jell immediately.

#### Cocoa

1 c. cocoa 2 c. water  
1 c. sugar milk  
few grains salt

Mix cocoa, sugar, salt; add water, and cook until smooth, thick paste is formed. If convenient, allow to cook a long time, 30 minutes or more, in a double boiler to improve the flavor. For 1 cup of cocoa use 1 tbsp. of this paste in 1 c. of hot milk. Do not boil the milk and cocoa together.

### Putting More Moisture into the Air we Breathe

The air about us affects both health and comfort in several ways—principally through temperature, humidity, rate of motion, chemical composition, odor, dust, and germ content. In temperature regulation we have already reached a high standard in the modern thermostatically controlled heating plant. Reasonable air circulation is accomplished by the action of the majority of our heating plants, while fresh air and additional circulation is automatically provided in the average house by leakage about windows and doors.

#### Germs and Dust

However, in the control of either the humidity or the dust and germ content of the air within our homes, we have made little progress, in large measure because we do not directly sense the harm or discomfort which these conditions may cause. Germs, and even dust in irritating quantities, are beyond our natural vision. While humidity affects our comfort, it does so largely through our sense of temperature, and, unfortunately, by adjusting the latter we are able to compensate, to the reasonable satisfaction of our senses, for what are really unhealthy conditions in the moisture content of our air.

Extremes of humidity affect our health in two ways. In the summer high humidity coupled with high temperature prevents the cooling of our bodies by the natural function of increased perspiration. In the winter the very low humidity produced when we heat out-of-door air to house temperatures permits an abnormally rapid evaporation of moisture from the body with several detrimental effects. This evaporation of the moisture, which is at all times present at the surface of our bodies, reduces the temperature of these surfaces, producing a sensation of cold. Our reaction is to increase the temperature of our rooms until this sensation of chilliness disappears. As a result, we live in rooms ranging between 70° and 80° and wear clothing in which we would actually suffer from heat if there were as much moisture in the air as we normally have in the comfortable weather of late spring and early summer. If instead of increasing the temperature of the air in our rooms we were to increase its humidity to correspond with the normal moisture content of out-of-door air in our temperate seasons, we should find ourselves comfortable at indoor temperatures ranging from 60° to 65°.

At the elevated temperatures prevailing in the majority of our homes we add necessarily to the shock which our bodies receive on going out of doors. What is worse under these same conditions of high indoor temperature and low humidity, the mucous membranes lining the respiratory passages become dry, uncomfortable, and frequently inflamed, making us more susceptible to many diseases that enter the body through these channels.

Beyond its effect on our health, our pocketbooks also suffer from our failure to maintain a proper control of the humidity in our homes. It is estimated that 25% of the cost of heating our houses is incurred in raising the temperature from 62° to 72° F. We are not without means for controlling either the humidity or the dust and germ content of the air in our homes. It is, however, rather a reflection on our usual tendency to cater to our material com-

# 44,882 Cows

in one survey show

## Cow Chow Made-

### 3 lbs. more milk per cow, per day

### ½ lb. more milk per lb. of feed

### 22¢ cheaper cost per 100 lbs. Milk

~ than the average of all other feeds!

**PURINA DAIRY CHOWS**

\*These figures are by no means complete. The same survey is now being conducted all over the United States.

# PURINA MILLS

854 Gratiot Street  
St. Louis, Mo.  
Sold at the stores with the checkerboard sign in the United States and Canada

fort, that this equipment was originally developed for industrial processes that demanded a closer regulation of air conditions than those under which our bodies regularly suffer at home. For more than a decade these conditions, as well as temperature and air circulation, have been accurately controlled by the air conditioning equipment in hundreds of industrial plants throughout the country.

More recently the use of air conditioning equipment has been extended to

hospitals, theaters, department stores, and office buildings. While it is true that this equipment is both complex and expensive, it is no more so than many of the devices which have been adapted to domestic use once the need was realized.

It might be well to point out that many of the devices now on the market in the way of small water containers to be attached to radiators have so little evaporative capacity as to be of almost negligible value. In an ordinary house the air change due to leaks about the

windows amounts to from one to two complete changes per hour. In order to supply the requisite moisture to bring the humidity of the house up to 50%, the amount recommended by competent medical authorities, an evaporation of one to two gallons per hour is required. —Industrial Bulletin.

Uncle Ab says if vitamins will do as much for humans as they have done for milk, spinach, lettuce, and liver he looks forward to an active old age.



# OUR TWELFTH YEAR

By H. D. ALLEBACH, President

(Continued from page 8)

of the milk prices paid within our territory and other information as to price of butter and policies of the organization.

This monthly paper, we believe, fills a very definite place and serves a definite purpose in our organization. It is financed largely through advertising space. I would like to draw to your attention that if you expect this paper to continue on the present high plane more of you when writing to the advertisers must mention just where you saw the advertisement.

This paper has been published by our Editor, August A. Miller, ever since it started. Last year we added to the staff an advertising manager, Frederick Shangle, our Vice President.

As time goes on the work of the Milk Producers' Review becomes of more and more fundamental importance. It is evident that such announcements as that of the revised selling plan last July were read by practically all our active members. We hope in the future to make the presentation of such programs an even more worth while feature of the association's work.

## Field and Test Department

F. M. Twining, the director, and the eight field men of this department have visited 154 plants, made 85,577 butter fat tests and added 952 names to the membership. They have recorded 348 changes in shipping arrangements. I feel that that this department is giving the members a unique service, not just in testing their milk and weighing it. They have added a new project to their list and are testing individual cows in our member's herds, finding the actual butterfat and production rate of each cow. They are glad to make as many of these tests as possible during the year.

It is evident that the work of our fieldmen is more and more appreciated. Year by year they have been increasingly called on to help solve minor problems for many of our members. We are glad to see this.

## Statistical Work

It has been nearly two years since we added a statistical department to our organization. This department is under the direction of J. O. Eastlack. One of the duties of this department is to compile and furnish to the officers and Board of Directors information concerning the production of milk and milk products, the trends in the market, the holdings of butter, the increase and decrease in the production of milk per farm per month, and such other data as will be valuable in establishing market policies. We now have a complete file of the production of each member each month, which is kept up to date through regular reports from co-operating dealers. These new records aid the testing department to see that all members shipping to co-operating dealers have their milk checked tested regularly and also aid in the adjustment of all price complaints.

## Philadelphia Inter-State Dairy Council

A report of the work of the Philadelphia Inter-State Dairy Council throughout the past year was made by the Secretary, Mr. R. W. Balderston. This organization was incorporated last May, with a membership composed of one-half of the nominees of the Inter-State Milk Producers' Association and one-half nominated by co-operating dealers. On its Board of Directors we are represented by half of its membership.

At the Annual Meeting of the National Co-operative Milk Producers' Federation the importance of greater consumption of dairy products was emphasized as one of the important objects for which our co-operative associations of all kinds should be working. The Philadelphia Inter-State Dairy Council was one of the pioneers in taking up work of this kind, the Dairy Council in this city being first of all such organized groups in affiliation with the National Dairy Council. At the Annual Meeting of the Inter-State Milk Producers' Association, held in 1920, the Dairy Council program was adopted by you and has been carried out steadily ever since. It is our opinion that a favorable market for dairy products has been largely due to and can only be maintained by vigorously pushing work of this kind.

TABLE IV  
VOLUME OF MILK BY STATES IN WHICH PRODUCED  
DATA IN POUNDS FLUID MILK

STATE	POUNDS MILK	PER CENT OF TOTAL
Pennsylvania.....	521,724,780	65.4
New Jersey.....	91,826,089	11.5
Delaware.....	67,221,545	8.4
Maryland.....	112,506,711	14.1
West Virginia.....	5,089,103	0.6
TOTAL.....	798,368,228	100.00

## New Office Home

Since our last annual meeting we have changed our headquarters from 1211 Arch Street to 219 N. Broad Street, where we occupy the tenth floor of the Flint Building.

When the five-year lease of the association at the former location terminated April 1, 1928, it was the united opinion of your Board of Directors, that it would promote efficiency and, in the end, economy for the association and the Dairy Council to move to quarters which would more nearly meet with the increasing needs of both organizations.

We were very glad to find at the new location a whole floor which would accommodate both organizations comfortably and entirely. We are now on the Tenth Floor of the Flint Building, 219 N. Broad Street. There is light on four sides, and the building is of concrete construction and considered to be as nearly fire-proof as buildings can be made. This space has been so divided as to make the work of all departments of both organizations most efficient.

We hope all members, particularly those who are here today, if they have not already done so, will visit the association's offices and make them their Philadelphia headquarters both on this and subsequent visits.

## Board of Directors

The Board of Directors held six bi-monthly meetings during this year. The average attendance of the members of the Board of Directors during the year was 96%.

We found a year ago that so many directors must spend two days in coming to, attending, and going from meetings of the Board that with very little additional expense the directors' meetings could be extended to two days—one long session one afternoon and one the next morning, thus practically doubling the number of

hours spent in discussing your business. The important problems that come before the directors are too complicated and have too many aspects to be quickly solved. It is not right that the directors from lack of time must leave too many problems to the Executive Committee or the officers. May I here commend the Board of Directors for the punctuality and interest they have shown and the almost hundred percent attendance at our meetings throughout the year.

The Executive Committee meets as called by the President, but all its actions are reported to the Board of Directors and its minutes must be approved by that body. It has been called together at frequent intervals as specific problems arose, both with reference to the administration of the affairs of the Association and particularly from time to time to consider the market situation. It has held conferences with the buyers to discuss problems in connection with the operation of the Philadelphia Selling Plan.

## Plans and Programs for 1929 Marketing Plans

Our plans for 1929 do not carry many changes. The Philadelphia Selling Plan was not established to have all the milk produced in any one month nor was it established with the idea of having your herds changed around so that you actually produce more milk in October, November and December than you do in the other months. If some producers continue to do this we may be compelled to make changes in our Selling Plan to meet conditions. By our Selling Plan we are taking care of all the producers who are going through the experience of testing their herds for tuberculosis. We make special plans for all such members so as to give them a fair arrangement.

## Membership Service

I am much interested, as I know you are, in the development of a membership service department, following out the idea in an annual meeting resolution adopted a year ago with respect to the payment of hall rent for local meetings and the issuance of notices of such meetings by the central office. We have been carefully canvassing the whole situation with respect to membership records and propose during next year to set up a complete new system which will make it possible for the home office to be of even greater service to our locals in the matter of keeping membership records thoroughly up to date at all times, and the issuance of notices of local meetings.

Vice President Frederick Shangle has been placed definitely in charge of the care of this co-operative work with our local units. I am glad to see the number of local meetings increase. The enthusiasm and interest displayed at the meetings this year shows the value of our united effort to aid our membership in its local activities.

I know that you agree with me that it is of fundamental importance that we have live locals throughout the territory to help our members keep informed as to general market conditions and to solve local problems as they arise. I know Mr. Shangle and those associated with him in this work want to make this service as full as it possibly can be in the future.

## Co-ordination and Co-operation

We are gradually co-ordinating various activities which center around the sale of your milk. These include such statistical work as is fundamental to a complete knowledge of your market and the markets of the world, complete records of our shippers of milk, month by month and, as far as possible, the receipts of milk within the market either from members or non-members. They include also the services of the field and test department. Together with the Philadelphia Inter-State Dairy Council, we are co-operating with the health and educational organizations in the five states in which we operate, to aid in solving the important problems connected with the industry.

## Plans for Coming Year

1. To enlarge all services to our members.
2. To enlarge our membership.
3. To revise our membership records so as to locate our members in the most convenient local.
4. To increase local activities.
5. Through study of the market and meetings with our members to further improve the operation of the Philadelphia Selling Plan.

## EIGHTH ANNUAL REPORT

Philadelphia Inter-State Dairy Council

By R. W. Balderston, Secretary

(Continued from page 2)

Up to October 31, 1928, there have been 118,599 farm inspections made since the Quality Control Department was organized. During the year 686 dairies were discontinued, and 302 dairies were reinstated.

## DRAMATIC DEPARTMENT

No. of Performances of Plays.....	344
No. of Rehearsals.....	580
No. of Talks.....	611
Special Plays.....	8
Slide Talks.....	170
Short Plays sent out without a Director.....	100
Contacts.....	80
Castings.....	95

Attendance:	
Children.....	348,764
Adults.....	19,417

Total attendance..... 368,181

## NUTRITION DEPARTMENT

Interviews.....	2,424
Stories.....	3,469
Lectures.....	372
Slides.....	348
Moving Pictures.....	105
Food Demonstrations.....	111

Attendance:	
Children.....	428,291
Adults.....	44,700

Total attendance..... 472,991

## PUBLICITY DEPARTMENT

Literature—pieces.....	1,192,869
No. displays of movies in theatres.....	1,442
Attendances.....	115,122
Mechanical devices—(days).....	720

# TWELFTH ANNUAL MEETING INTER-STATE MILK PRODUCERS' ASS'N

(Continued from page 9)

State Milk Producers' Association, on the subject of "National Progress of Farm Organizations." Mr. McSparran said in part:

"Farmers have for a long time needed comprehensive organization. Other business groups have had theirs developed to a high state of perfection and agriculture has found it difficult to cope with them when interests conflicted and they often have conflicted. Railroads want to make money and agriculture wants cheap transportation. Banks want to loan money at a high rate and the long time turn over of the farm needs a low rate of interest.

"Distribution wants a liberal spread between producer and consumer while agriculture and consumer alike seek to narrow that spread. Examples are abundant to show that the more perfect organization of these groups of industry and commerce and distribution have secured privileges that are very valuable to their businesses. Agriculture has been greatly benefited by co-operative effort but it is now evident that an attack is going to be made in the near future upon the cooperative and the farmer must understand that he will have to meet those groups which are opposed to cooperative effort with equally efficient organization.

"Judge Miller, president of the National Milk Producers' Federation in his annual message sounds the warning that the logic of holding a steady price for dairy products in case of continued surplus is going to hinge on closely organized local units which will be able to demand a square deal in all such emergencies. Judge Miller is right. The disposition among a large number of our people is to withdraw from our organization whenever anything happens to displease them. Such an attitude invites defeat. Let us fight for a proper policy in our farm organizations and then stick by the organization and speak as a unit to the world."

## Visiting Ladies Entertained

An entertainment and luncheon was provided for the visiting ladies of members and delegates on Thursday morning at the offices of the Inter-State Milk Producers' Association in the Flint Building. The program was under the direction of the following committee, Mrs. Robert F. Brinton, chairman; Mrs. H. D. Allebach, Mrs. Robert W. Balderston, Mrs. A. B. Waddington, Mrs. Frederick Shangle, Mrs. F. M. Twining and Mrs. C. I. Cohee.

The following program was presented: Address by the Chairman, Quartet—"Ole Cow Lady"—Milk Maids Short Talks from Our Members—Mrs. Robert E. Atkinson, Mrs. Charles Preston, Evelyn B. Spooner.

Glimpses from Afar—Mrs. Robert W. Balderston.

Greeting from the Dairy Council—Dr. C. W. Larson.

Further details of this meeting will be found on page 14 of this issue of the "Milk Producers' Review."

Organization of the Board of Directors—A formal organization meeting of the Board of Directors, following the election of the new members of the board was held on Thursday afternoon. The following officers and executive committee members were elected.

President, H. D. Allebach, Trappe, Pa.

Vice President, Frederick Shangle, Trenton, N. J.

Treasurer, Robert F. Brinton, West Chester, Pa.

Secretary, Robert W. Balderston, Media, Pa.

Assistant Secretary, I. R. Zollers, Pottstown, Pa.

Assistant Treasurer, F. M. Twining, Newtown, Pa.

## Executive Committee

H. D. Allebach, Trappe, Pa.

Frederick Shangle, Trenton, N. J.

A. B. Waddington, Woodstown, N. J.

R. F. Brinton, West Chester, Pa.

F. P. Willits, Ward, Pa.

E. H. Donovan, Brenford, Del.

## The Annual Banquet

Nearly seven hundred delegates, members and guests of the Association attended the Annual Banquet of the Association, which was held at the Benjamin Franklin Hotel on Thursday evening. President Allebach acted as master of ceremonies. This banquet was unique in that there were no set speeches. The entertainment features were presented under the direction of the Dairy Council.

Two health dramatic playlets were presented by children of Philadelphia Public Schools, one, "Silly Goose's Mistake" was presented by children from the 3rd and 4th grades of the Hamilton Public School and the other "The Doll Shop" by children from the Cassidy Public School. Our own "Dairy Maids" presented their annual songs and dances "In the Good Old Milking Time."

"What's the Big Idea"—a cooperative marketing play, by Prof. "Happy" Goldsmith, was presented by members of the Inter-State Milk Producers' Association and the Dairy Council. This new play emphasizes the value of cooperative marketing by the dairy farmer. It was prepared for presentation at meetings of dairy farmers in the Inter-State Milk Producers' Association territory.

Before closing the banquet three short responses were made, at the request of President Allebach. One by Hon. G. A. Welsh, Philadelphia Board of Education, representing the public, another by Daniel Adams, of St. Lawrence Dairies Co., Reading, Pa., representing the distributors and one by F. P. Willits, representing the milk producers.

## Visits to Milk Plants

Many delegates and directors availed themselves of the opportunity to visit the various milk distribution and ice cream plants on Friday morning. These visits were made by automobile buses and were under the direction of F. M. Twining and members of the Field Forces of the Milk Producers' Association and the Quality Control Department of the Dairy Council.

## The Second Day's Session

The second day's session, which in addition to a members' meeting, was open to the public, continued the general program of discussion. In addition two outstanding addresses were presented. Dr. C. W. Larson, Managing Director, National Dairy Council, Chicago, Ill., addressed the meeting on "The Dairy Council Movement," while Dr. Clyde L. King, president of the Philadelphia Inter-State Dairy Council outlined his impressions of agriculture during the past summer and the economic questions that have arisen in his mind from that study, together with some possible methods for our farmers to meet production and competitive methods as practiced abroad.

# Keep your COWS FIT!



DAIRY authorities, as well as successful dairymen, agree that the profit on the yearly work of a cow depends upon the condition she is in when she freshens. If she has been made to give all the milk possible before she calves, she will not "bag up" and, in consequence, will not freshen with a big milk flow. Or, if the cow has been dried off but not fed so that she can build up a reserve in the form of extra weight, she will not be in condition to bag up nicely before calving and be ready to fill the pail to the brim for a long time after freshening.

UNION GRAINS is an outstanding feed, not only for producing a heavy milk flow, but also for feeding valuable dairy cows during the critical time between drying off and freshening. UNION GRAINS with any suitable roughage makes an ideal ration for feeding during this resting period.

There are five types of UNION GRAINS—differing in their percentage of protein. They are all a mixture of many kinds of sound wholesome

grains, by-products and other valuable ingredients. For this reason they are complete in their protein. That is why they are adapted for supplementing home-grown corn and oats, as well as all the different kinds of farm-raised roughage.

Whatever you raise for roughage, whatever you raise for home-grown grains, there is a type of UNION GRAINS that will balance them and make a perfect ration—one that will keep the cows in the finest health and increase the milk yield.

## Write for UNION GRAINS Booklet

We have prepared a new booklet describing the five types of UNION GRAINS, as well as other Union World Record Feeds. You may have a copy on request—postpaid. Address

THE UBIKO MILLING CO., Dept. L-24, Cincinnati, Ohio



## Makers of UBIKO World Record Feeds

- UBIKO All-Mash System
- Starting and Growing Ration
- Complete Laying Ration
- UBIKO World Record Egg Mash
- UBIKO Fattening Mash
- UBIKO Scratch Feed
- UBIKO Pig and Hog Ration
- UBIKO Horse Feeds
- Union Grains Dairy Rations
- And other UBIKO World Record Feeds

**UNION GRAINS**  
THE FIRST DAIRY FEED MADE

24% Dry, 16%, 20%, 24%, 32% Sweet

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USE FEEDS CONTAINING OBERCO  
**Russell F. Carter**  
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**says:** My pigs  
are always well  
born, with  
large bone  
and size.  
I feed

**OBERCO  
ORGANIC  
MINERALS**

"THE BACKBONE OF THE FEED"

FOR COWS - HOGS - POULTRY

START feeding your pigs before  
they are born. Your sows will far-  
row thrifty, vigorous, fast-growing  
pigs if you feed them well-balanced  
complete feed containing plenty of  
Oberco Organic Minerals. Start  
feeding your sows Oberco now—get  
better pigs next Spring.  
Our booklet, "Minerals for Farm  
Animals," tells why minerals are  
necessary and why OBERCO is the  
most effective, digestible and econ-  
omical mineral mixture.  
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Single rooms \$3.00 3.50 4.00  
Double rooms 4.50 5.00 6.00  
LUNCHEON .60 and .75  
DINNER \$1.00, \$1.15, \$1.50

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Weights and grades guaranteed.  
Prompt shipment. Write for delivered  
prices.

**JOHN DEVLIN HAY CO., Inc.**  
192 N. Clark St., Chicago, Ill.

**Training a Toddler**

"Has your baby learned to walk yet?"  
"Heavens, no! Why, he's just learn-  
ing to drive the car."—Kansas City  
Star.

Give children responsibilities appro-  
priate to their age and experience.

## Commonplace Observations of European Farming

By R. W. BALDERSTON

As one observes the commonplace farm practices of the various American agricultural districts, he is led some-  
times to wonder how such practices  
originated and from what part of the  
mother-land of Europe they were  
brought to the new home to become, for  
two centuries, the everyday practice of  
the people.

Take for instance, the matter of har-  
ness. In England the style is quite  
different from that in either France or  
Germany. Within Germany the har-  
ness in Westphalia looks entirely dif-  
ferent from that in Bavaria. But one  
can see where many American customs  
have originated in these various coun-  
tries and have been brought over with  
the first or subsequent groups of settlers.

In rural England almost all hauling  
is done with one horse hitched singly  
to a two-wheeled cart or four-wheeled  
wagon with cart harness exactly like  
that used for all cart work in Penna.  
Undoubtedly the English harness makers  
set the Penna. style in this regard. When  
for heavier loads additional horses are  
needed in England they are added in  
front of the shaft horse, tandem. Much  
English farm machinery is built to use  
the same cart harness method of hitch.  
In many sections of France while the  
harness is quite different the same tan-  
dem teams are seen and enormous loads  
of hay and grain are hauled to the barn  
on two wheeled carts with long skeleton  
beds built for the purpose. The horse  
collar has received characteristic artis-  
tic touches from the harness makers  
in many lands. A careful observer can  
tell from the horse collars in any paint-  
ing or photo of a rural scene just where  
it was posed. The modern American  
type of horse collar is certainly English.

In Holland and over much of Ger-  
many no collar and hames are employed,  
a breast strap being used for even the  
heaviest labor, with a broad neck-strap  
when necessary to hold up the tongue of  
the wagon. Holland being absolutely  
flat, no tongue or pole is built into the  
wagon. The typical Holland vehicle is  
a dump cart with a short stub tongue  
under which runs, nonchalantly, a small  
castor-wheel. Horses are hitched to the  
end of this tongue by very simple  
breast-strap harness. All guidance of  
these and all other farm carts is by  
pressure of the driver on this short  
wagon tongue. Riding sideways on this  
part of the vehicle, he climbs hastily  
to the ground on hearing an auto horn  
and guides his wagon to the roadside by  
a sideways pressure while steed or  
steeds continue on down the road with-  
out regard to the manipulation of the  
vehicle. Why the whole outfit does not  
land each time in the deep drainage  
ditch at the roadside is always a miracle  
to one unaccustomed to the practice.

Farm machinery in Holland is usu-  
ally built with the same castor wheel in  
front, so the same hitch works for all.  
Rural visitors from other sections of  
the United States traversing Lancaster,  
York and other nearby counties in  
Pennsylvania always remark on the  
novelty of the left-hand plow and the  
jerk-line method of driving, both of  
which have been for generations almost  
universal practices in these sections. It  
was not until we visited Oberbayern, a  
Province of Bavaria that we noticed  
similar practices in Europe. Without

any other evidence to substantiate the  
observation this would seem to be an  
indication that some German settlers  
in the early days of Penna. brought with  
them a time-honored home-land practice  
and so firmly implanted it in the new  
country that it has remained for modern  
plow manufacturers to make left-hand  
as well as right-hand plows and thus  
continue to perpetuate a practice that is  
remarked upon as distinctly novel by  
visitors passing through the heart of  
southern Pennsylvania.

Such a recital might be continued  
and duplicated to include many other  
farm practices, equally homely, fully as  
time-honored and with just as interest-  
ing similarities and differences. Many  
of these practices such as styles in har-  
shocking and stacking grain and in har-  
vesting hay are undoubtedly based  
directly on experience and owe their  
character to climatic or other conditions  
under which the people have operated.

A whole paper could be written, if one  
had time, regarding the various devices  
in use for aiding in the drying of hay.  
In Switzerland and Bavaria there is  
used, as a foundation for each hay-cock,  
a pointed stick perhaps 5 feet long with  
two cross arms of two feet each at right  
angles to each other and dividing the  
stick into approximately four equal  
parts. Driven slightly into the ground  
such a crude "clothes pole" is the  
foundation around which the hay is  
draped. In north Germany and Den-  
mark a tripod is similarly employed, and  
while in Norway eight years ago I saw  
them drying the hay on temporary fen-  
ces of rail or wire erected hastily across  
the field after the grass is cut.

On the other hand, everywhere we  
were shown with pride many machines  
and tools of American origin—developed  
by American ingenuity to make farm  
practices more efficient. In England cul-  
tivating tools of a well known Phila-  
delphia make were in common use and  
were stated to be most effective and  
somewhat more convenient than the  
heavier English makes. American har-  
vesting machinery is all over Europe. It  
will be many years however, before the  
use of labor-saving machinery is suf-  
ficiently widespread in Europe to make  
human labor as efficient as in the United  
States. Meanwhile the rural-minded  
traveller in Europe can continue to see  
as he travels about the interesting old-  
time farm-practices, time honored by  
centuries of common usage. Much of  
European agriculture is yet in the stage  
that we passed from in the United  
States with the introduction in the  
80's and 90's of modern factory-made  
wagons, machines and tools which in-  
creased many fold human efficiency and  
lightened human labor. One cannot  
but predict that more quickly than they  
themselves realize, there will come to all  
Europe a rapid advancement in the  
mechanical equipment of the farm and  
farm home and the old local customs  
and practices, picturesque and interest-  
ing as they are, will for the most part  
go the way of the old-time peculiar  
peasant costumes now of the past, and  
only brought out to grace festival days  
or to exhibit to American tourists.

It's the wise farmer who knows what  
insects destroy his crops and takes meas-  
ures against them.

## Legal Bushel Weights Of Commodities Given

The Pennsylvania Department of  
Agriculture publishes the following  
handy reference table of legal bushel  
weights now in force in the Common-  
wealth as provided in the Act of July  
24, 1913, with subsequent amendments:

Fruits	Pounds
Apples	45
Apples, dried	25
Cherries, with stems	56
Cherries, stemmed	64
Cranberries	32
Currants	40
Gooseberries	40
Grapes	48
Peaches	48
Peaches, dried (peeled)	38
Peaches, dried (unpeeled)	33
Pears	50
Plums	64
Quinces	48
Raspberries	48
Strawberries	48

Vegetables	Pounds
Beans, dried	60
Beans, castor (shelled)	46
Beets	56
Cabbage	50
Carrots	50
Cucumbers	48
Horseradish	50
Onions	50
Onion sets	28
Parsnips	50
Peas, green (unshelled)	28
Peas, dried	60
Potatoes	60
Potatoes, sweet	54
Rutabagas	60
Spinach	12
Tomatoes	56
Turnips	56

Grain and Grain Feeds	Pounds
Barley	48
Bran	20
Buckwheat	48
Corn, shelled	56
Corn, ear (husked)	70
Corn, meal	50
Hominy	60
Malt	38
Oats	32
Rice, rough	45
Rye	56
Rye meal	50
Shorts	20
Spelt	40
Wheat	60

Grasses, Forage, Etc.	Pounds
Alfalfa seed	60
Blue grass seed	14
Broom corn seed	50
Clover seed	60
Flax seed	56
Hemp seed	44
Herd's grass	45
Hungarian grass seed	50
Kaffir corn	56
Lentils	60
Linseed	56
Millet	14
Orchard grass seed	50
Rape seed	14
Redtop grass seed	50
Sorghum seed	50
Timothy grass seed	45

Nuts	Pounds
Chestnuts hulled	50
Hickory nuts	50
Peanuts	22
Walnuts, common	50

Miscellaneous	Pounds
Cement	100
Charcoal	20
Coal, anthracite	75
Coal, bituminous	76
Coal, stone	80
Coke	40
Hair (plastering)	8
Lime	80
Salt, coarse	85
Salt, ground	62
Sand	100

## Farmers Must Think in Economic Terms, Says Olsen

Declaring that the demand for agri-  
cultural information in the economic  
field is perhaps greater than in any  
other, Nils A. Olsen, chief of the Bureau  
of Agricultural Economics, United States  
Department of Agriculture, told the 42nd  
Annual Convention of the Association  
of Land-Grant Colleges and Universi-  
ties, at Washington, D. C., recently, that  
"our first and foremost job is to help  
the farmer think in economic terms."

Farmers must realize, he said, that  
farm returns are vitally affected by eco-  
nomic forces; they must understand  
that supply and demand forces deter-  
mine for any given crop the level at  
which products will sell, and not the  
cost of producing that crop; they must  
learn that economic conditions affecting  
their business do not remain static but  
change, and as they change they influ-  
ence farm income at one time differently  
than at another time; and that economic  
forces affecting agriculture are not  
purely local in their operation but usu-  
ally play over the whole gamut of com-  
peting territories, domestic and foreign.

"Fortunately," Mr. Olsen declared,  
"the economic approach is gradually  
taking its rightful place alongside the  
purely production approach in the minds  
of American farmers. There is, how-  
ever, abundant opportunity for further  
educational work in this direction, the  
output of the Bureau of Agricultural  
Economics, as well as of the economics  
departments of the State agricultural  
colleges and experiment stations afford  
splendid material with which to illus-  
trate the operation of economic forces  
and public policies affecting agriculture."

Mr. Olsen enumerated the bureau's  
annual outlook reports, the intentions-to-  
plant surveys, the midsummer outlook  
reports and the monthly statement on  
the price situation as types of material  
which aid farmers to make adjustments  
in planning farm production and market-  
ing. Many states, he said, are using  
this national interpretative material, to-  
gether with local material, as a basis  
for yearly or periodical state outlook  
reports, and monthly state price situa-  
tion statements.

"Successful agriculture," he declared,  
"will not be built on individual effort  
alone. Collective action, whether among  
farmers themselves or through the me-  
dium of Government, will have a vital  
bearing on the industry. Farmers must  
think the spirit and philosophy of co-  
operation if their efforts in cooperative  
marketing, cooperative credit coopera-  
tive insurance and the like are to prove  
successful in the highest degree. The  
Bureau of Agricultural Economics is  
prepared to place at their disposal a fund  
of facts to assist farmers in their co-  
operative ventures."

"These past several years have dem-  
onstrated as perhaps never before, that  
farmers are a vital part of the body  
politic. Their interests are deeply in-  
fluenced by the conditions which affect  
the Nation as a whole and by public  
policies of one kind or another. To  
what extent, for example, has their pros-  
perity been adversely affected by na-  
tional and State demands with refer-  
ence to the utilization of farm lands? What  
do farmers today think about  
bringing more lands into use at a time  
when surpluses menace their incomes? To  
what extent are farm lands bearing an  
undue portion of the tax burden? What  
can they do to adjust tax in-  
equalities? What bearing does the tar-  
iff have upon farm returns? Is the tar-  
iff, as a national policy, serving to equal-  
ize opportunities? I visualize the time  
when farmers will take their rightful  
part in shaping National and State poli-  
cies which touch their prosperity."

## Annual Report of the Secretary Inter-State Milk Producers' Association

By R. W. BALDERSTON

During the past year 1030 stock cer-  
tificates have been issued for a total of  
694.2 shares of stock. In the same pe-  
riod there have been 35 stock transfers,  
19 withdrawals from the Association and  
115 deaths reported of members of the  
Association. This makes a net mem-  
bership when the books closed of 25,968  
for 1928 as compared with 24,982 on the  
corresponding date one year ago.

### Locals and Local Meetings

One year ago we had 281 locals. Now  
there are 287, making a gain of 6 locals  
during the year. Of these there are located:

199 in Pennsylvania
40 in Maryland
29 in New Jersey
18 in Delaware

and one has just been formed at Mar-  
tinsburg, West Virginia. Our records  
show that nearly all these locals have  
held meetings during the year, most of  
which were attended by representatives  
from the home office.

### Directors and Executive Committee

During the past year the Board of  
Directors have held 6 meetings with an  
average attendance of 96%. The Execu-  
tive Committee held 12 meetings with  
an average attendance of 97%.

The Board of 24 Directors, during the  
past year, has been made up of:

15 from Pennsylvania
5 from Maryland
3 from New Jersey
1 from Delaware

The Executive Committee of 7 is com-  
posed of:

3 from Pennsylvania
2 from New Jersey
1 from Delaware
1 from Maryland

### Increase in Business Over Six Year Period

As an indication of the increase of  
the business done through the Associa-  
tion since 1923—(the first year after  
the rate of commission was increased)  
may I quote the following figures. In  
1923 the total commission paid by mem-  
bers was approximately \$50,000 and in  
1928 \$93,078.56, making an increase of  
86.2%.

In 1923 and 1924 approximately \$2,000  
of this was paid directly by the mem-  
bers. At the present time, due to the  
increasing number of dealers coopera-  
ting, practically all commission is paid  
through the dealers.

## Dry Wood Burns Bright and Gives More Heat

If firewood is to give the maximum of  
heat in either stove or fireplace it must  
be seasoned before it is burned. "A  
piece of green wood," says Rolf Thelen,  
of the United States Department of Agri-  
culture, "will throw out less heat if  
burned green than if dried first. Green  
wood, of course, may be preferred for  
fuel when it is desired to keep a low fire  
for a long time, but as a rule the prac-  
tical advantages of having firewood well  
dried are unquestioned. After cutting  
firewood, therefore, the first object is  
quick drying.

"In order to dry wood as fast as pos-  
sible, it is necessary to expose it to sun  
and wind and protect it from rain. The  
piles should be as narrow and as open

## Sixteen New Jersey Farm Groups to Meet Agricultural Week

The greatest gathering of farmers in  
New Jersey is planned for Agricultural  
Week, which will be held in Trenton  
from January 15 to 18. Sixteen state  
agricultural organizations are scheduled  
to hold a total of forty sessions which  
will cover all phases of farming. In ad-  
dition there will be a large Farm Pro-  
ducts and Equipment Show and a certi-  
fied baby chick exhibit.

The official State Agricultural Con-  
vention, at which two members of the  
State Board of Agriculture are elected,  
will be preceded this year by an evening  
conference, to which the Board has in-  
vited as its guests the delegates repre-  
senting all the county boards, Pomona  
Granges and agricultural organizations,  
the executive committees of the Federa-  
tion of County Boards of Agriculture  
and the State Grange. This conference  
will be held Tuesday evening, January  
15, with the Convention on Wednesday.  
During the next two days, fifteen special  
interest organizations have arranged  
meetings in various auditoriums pro-  
vided by the State Department of Agri-  
culture, which acts as host to the visit-  
ing delegations.

Besides the State Board of Agricul-  
ture, the other farm groups meeting  
during Agricultural Week are: The New  
Jersey Federation of County Boards of  
Agriculture, New Jersey State Poultry  
Association, State Potato Association,  
New Jersey Alfalfa Association, Hol-  
stein-Friesian Cooperative Association of  
New Jersey, New Jersey Guernsey  
Breeders' Association, Jersey Cattle  
Association of New Jersey, New Jersey  
Dairymen, Farmers' Roadside Market  
Association, New Jersey Home Bureau,  
Bee Keepers Association, State Horti-  
cultural Society, New Jersey Swine  
Growers, Vocational Teachers and the  
State Council of Churches.

The Farm Products and Equipment  
Show will be much larger this year,  
with more diversified exhibits and a more  
elaborate display of farm products.  
About twenty-five of the largest certi-  
fied baby chick breeders in the state are  
planning to exhibit at the Baby Chick  
Show. The meetings and exhibits afford  
a universal appeal for every type of  
farmer and Trenton will be the mecca  
for every New Jersey agriculturalist  
during the third week in January.

Use your milk house for the care and  
handling of milk only—not to store tools  
and implements. Milk needs all pos-  
sible care to keep it clean.

**Turn Roughage  
Into Money**

Save the price of  
Dellinger hammer  
type mill in one  
season's use by  
grinding your grain  
and roughage.  
Any farm tractor or  
15 H. P. motor will  
operate mill.  
No knives to grind.  
No plates to dull. Practically self-feeding.  
Large capacity. Sold on guarantee to do the  
work in satisfactory manner to customer.

Write for Catalogue  
A. M. DELLINGER  
727 N. Prince St. Lancaster, Pa.

## High Grade Dairy Cows

in  
HIGHTSTOWN, N. J.

We handle all kinds of cattle

**Holsteins—Guernseys—Jerseys**  
A Specialty

All cows tuberculin tested and sold  
subject to a 60 or 90 day retest and fully  
guaranteed in every respect.

Free delivery any distance.

**B. ZAITZ & SON**

202 Mercer Street

Phone 72 Hightstown, N. J.

## UNUSUAL OPPORTUNITY

to buy

**Registered Guernsey Heifers**

From T.B. Accredited and Blood Tested Herds

Two Year Old and Bred  
(Some Due to Freshen Soon)

Daughters of Langwater Penant 81787,  
granddaughters of Langwater Valiant 51868

For Sale Also—Surge Milker—Cheap

**S. PAUL WOODMAN**

Rushland, Bucks Co., Pa.



## 100 Real Dairy Cows 100

For sale at all times. Tuberculin tested Holsteins,  
Guernseys, and Jerseys. Real milk producers.  
Carload lots a specialty. Priced to sell.

See or Write

**JACOB ZLOTKIN**

Phone 330 FREEHOLD, N. J.

## For Bigger Milk Producers Feed Calves on

## DRY SKIM MILK

There is no substitute for milk in raising good  
milk producers. Start calves on whole milk.  
Change gradually to recombined skim milk (dry  
skim milk and water) which costs less than half  
as much. Then change to grain mixture, plus  
dry skim milk.

Dry skim milk gives vitamins, proteins and  
calcium... all necessary to calves. Dry skim  
milk reduces digestive disturbances.  
Write for bulletin 301... contains impor-  
tant valuable information on calf raising—  
FREE! Or send \$2c for 4-b. sample.

AMERICAN DRY MILK INSTITUTE, Inc.

160 N. La Salle St. Room 720W Chicago

## DENATURED ALCOHOL

70c Gal.

## Satterthwaite's Seed Store

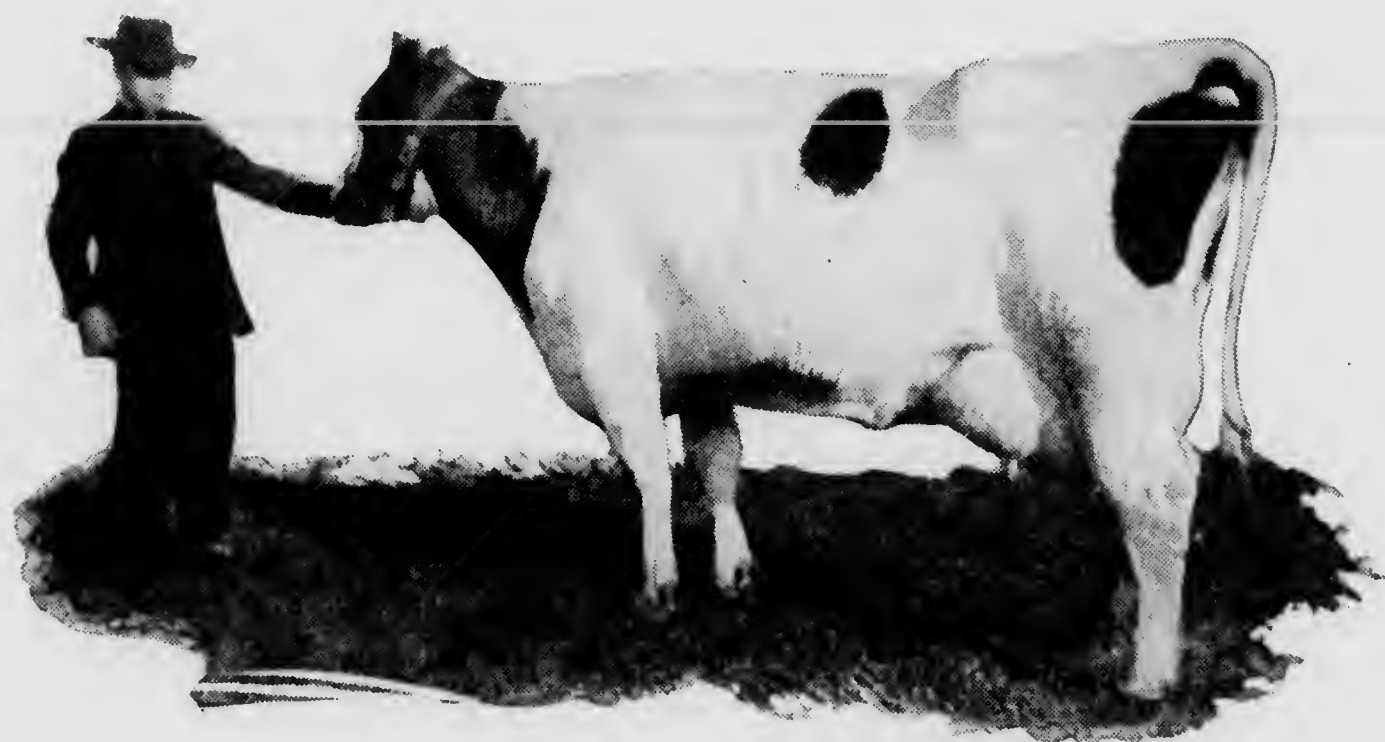
Seeds, Garden Supplies, Hardware

16 North Warren Street TRENTON, N. J.



# De Laval Milker Helps Make Records at Garden Spot Dairy Farm

Mr. Allen G. Brubaker, owner of the Garden Spot Dairy Farm, Mount Joy, Pa., and one of the purebred Holsteins of his herd.



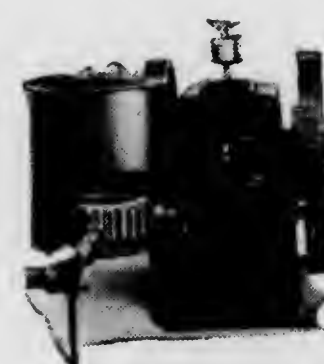
Mr. Brubaker is an enthusiastic De Laval Milker user, having accomplished excellent results in the way of greater production.

ONE of the outstanding herds in the state of Pennsylvania is the purebred Holstein herd owned by Mr. Allen G. Brubaker at the Garden Spot Dairy Farm, Mount Joy, Pa. Mr. Brubaker, who is an experienced dairyman, selected the De Laval Milker to assist him in bringing about greater production, and recent records made there confirm his judgment in every way. He writes:

"One of my cows, Blacres Ormsby Cornucopia, has recently made a 7-day record at the age of 4½ years of 616.7 lbs. of milk, 31.2447 lbs. of fat, and 39.0558 lbs. of butter. This is the highest record ever made by a cow of this age or younger in the state of Pennsylvania.

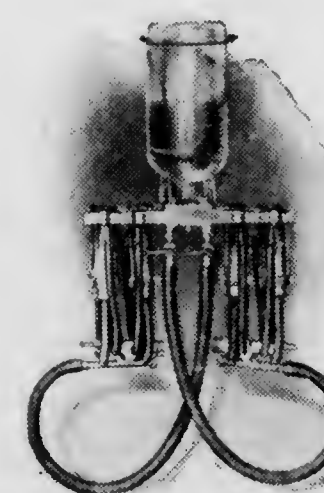
"I have been using the De Laval Milker for the past three years and it surely is a marvel. Though some of the other milkers may be good, the De Laval is the milker I want. It is good enough to use on test cows, as last year I had a Junior four-year-old that milked 22,470 lbs. of milk and a Junior two-year-old that milked over 12,000 lbs. of milk. In both cases the De Laval Milker was used entirely.

"I wish you the greatest success with your worthy products."



The Alpha Exhaust Water Heater provides a convenient and economical means of heating water for washing milkers. Designed for use with Alpha Engines but can be attached to most all engines. It is scientifically designed to absorb all the exhaust gases from the engine for heating purposes without introducing back pressure. It holds 3½ gallons of water. Sold by Authorized De Laval Dealers.

After the milker is cleaned it can be kept clean until the next milking by means of the De Laval Solution Rack. This device overcomes any objections heretofore encountered in the use of chemical solutions for sterilizing milkers. It fills the teat-cups and tubes full of solution and eliminates the possibility of air pockets. With this device the solution can be used but once so it is always full strength, and since the solution is applied only to the inside of the rubbers very little is required. Sold by Authorized De Laval Dealers.



THE DE LAVAL SEPARATOR CO.,  
New York, 165 Broadway  
Chicago, 600 Jackson Blvd.  
San Francisco, 61 Beale St.

Please send me, without obligation, full information on ☐ Milker ☐ Separator (check which)

Name.....

Town.....

State..... R.F.D. .... No. Cows.....

# De Laval Milker

# Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS' ASSOCIATION

Vol. IX

West Chester, Pa., and Philadelphia, Pa.,

No. 9

## "A" MILK STANDARDS

Uniform Definitions and Bonus Payments—January 1, 1929

The Inter-State Milk Producers' Association is now able to announce a standard definition for "A" milk as sold in the Philadelphia market and standard specifications for the bonuses to be paid for all milk purchased under its provisions by cooperating dealers.

Negotiations with regard to the matter of a uniform understanding and practice have been under way for some time, the final arrangements being agreed to at a conference with "A" milk buyers held in the office of the Association on January 4, 1929.

The memoranda outlining definitions of "A" milk as delivered by farmers at Terminal Markets and at Receiving Stations are given in detail below—likewise the methods of calculating bonuses for butter fat and for bacteria.

The marketing of "A" milk in this territory is a matter of several years development, a very healthy growth in sales being noticeable each year for several years past. The sales of "A" milk are now more than 1/3 of the total fluid milk volume sold by cooperating dealers in the Philadelphia metropolitan market.

### History of "A" Milk in the Philadelphia Market

In the early days of the Association, the production and sale of special classes of milk was not yet of sufficient importance to be a matter of general discussion at conferences. The problems of each group of producers of such milk were taken up individually with the buyer.

Some Philadelphia dealers gradually became interested in a new and more comprehensive idea of specially produced and prepared "A" milk. The plan was substantially as follows: One or more plants was selected for the collection of "A" milk. At these, special bacteria counts of the milk of each producer are made at

frequent intervals, and so-called standard plate method of bacterial analysis being used. To qualify as "A" milk, certain bacteria standards must be met, and for all milk with comparatively low counts, a bonus is added to the price of the milk as a remuneration for the extra care required to meet "A" milk requirements.

It was found that in this market the consumers demand that milk of a special grade or class selling at a higher price shall have, in addition to a low bacteria count, also a higher butterfat content. So gradually the system has been evolved in the Philadelphia market of having two minimum requirements—one for butter fat and one for bacteria count, and of paying bonuses for only such milk as meets both these requirements.

### Lack of Uniformity

The past five or six years might be looked upon as an experimental period in the marketing of "A" milk in the Philadelphia Milk Shed. Quite naturally each distributing Company thought at the beginning that it knew what its consumers demanded in the way of "A" milk, so it set up its own standards. Likewise it thought it had the best system of "A" milk bonuses by which to pay producers for extra expense of producing "A" milk. Such a variation in requirements and practices has led to much confusion.

The officers of the Inter-State Milk Producers' Association have been very active in watching out for our members' interests in consultation and conference regarding the establishment of "A" milk rules and prices on the part of individual distributors. The Board of Directors of the Association has carefully studied the situation from year to year and has made every effort to keep our members informed (Continued on page 12)

## Inter-State Milk Producers Association Requirements and Prices For "A" Milk APPLICABLE AT RECEIVING STATIONS Effective February 1, 1929

### Definition

"A" milk, as delivered at RECEIVING STATIONS in the Philadelphia territory is that milk produced by healthy cows which have successfully passed the tuberculin test in accordance with regulations of the Department of Agriculture under the accredited herd or area plans of the state in which produced. Such milk shall contain not less than 3.7% of butter fat as shown by the average monthly computed test. (Except at those plants where the minimum is at present other than 3.7%, the minimum test shall be increased or decreased one-tenth point per year, as the case may be, until the figure 3.7% is arrived at). The bacteria count of all such milk as delivered at receiving stations shall not exceed 100,000 bacteria or cubic centimeter. All samples taken for bacteria analysis shall be composite samples taken from the weigh tank or its outlet valve. There shall be no strainers on tanks previous to sampling. Samples shall be taken into individual sterilized containers held in sanitary holders. "Standard plate methods" are to be used.

No milk will be accepted as "A" milk from producers with an average production of less than 50 pounds of milk per day.

### Condition of Farms

The premises on which "A" milk is produced must be maintained in such a condition as to warrant the holding of a permanent permit issued by the Quality Control Department of the Philadelphia Inter-State Dairy Council.

### Method of Payment

For "A" milk delivered at receiving stations, the price shall be computed as follows: Use for calculating purposes the regular Inter-State Milk Producers' Association milk receiving station basic and surplus prices for 3.5% milk in the zone in which the receiving station is located. There shall be added to this, first, a differential of 6c per one tenth point of butter fat between 3.5% and 4.5%, and 8c per one tenth point above 4.5% and second, a bacteria bonus shall be added to the above which shall be determined as follows: Five bacteria counts shall be made per month for every producer, as above described. The highest count shall be discarded and the average of the remaining four shall determine the producer's average bacteria count for the month.

During the months of May, June, July, August, September, and October, a producer with an average count for the month (as above determined) of 10,000 bacteria or less, shall receive a bonus of 40c per hundred pounds, and a producer with an average count of more than 10,000 and less than 50,000, a bonus of 25c per hundred pounds. During November, December, January, February, March and April, the above bacteria bonuses shall be paid to those producers only who have received similar bonuses during three of the previous six months above mentioned, provided that at least one of the three months be July or August. Producers, in addition to the above mentioned, qualifying during the months of November, December, January, February, March and April, for "A" milk bonuses as above described, shall be paid a bonus of 25c per hundred pounds for a bacteria count of 10,000 or less and 15c per hundred pounds for a bacteria count of more than 10,000 and less than 50,000.

The "A" butter fat bonuses above outlined will be paid to only those farmers qualifying for the above outlined bacteria bonus, and likewise the bacteria bonus will be paid to only those farmers qualifying for the "A" butter fat bonus.

Furthermore, no "A" milk bonuses will be paid to such producers whose milk has scored as high as No. 3 on the Philadelphia Inter-State Dairy Council sediment score card and who, having been warned with respect to this matter, have been found with another such unsatisfactory sediment test score during the same month.

## Inter-State Milk Producers' Association Requirements and Prices For "A" Milk APPLICABLE AT TERMINAL MARKETS Effective February 1, 1929

### Definition

"A" milk, as delivered at TERMINAL MARKETS in the Philadelphia territory is that milk produced by healthy cows which have successfully passed the tuberculin test in accordance with regulations of the Department of Agriculture under the accredited herd or area plans of the state in which produced. Such milk shall contain not less than 4.0% of butter fat as shown by the average monthly computed test. The bacteria count of all such milk as delivered at terminal markets shall not exceed 200,000 bacteria per cubic centimeter. All samples for bacteria analysis shall be composite samples taken from the weigh tank or its outlet valve. There shall be no strainers on tanks previous to sampling. Samples shall be taken into individual sterilized containers held in sanitary holders. "Standard plate methods" are to be used.

No milk will be accepted as "A" milk from producers with an average production of less than 75 pounds of milk per day.

### Condition of Farms

The premises on which "A" milk is produced must be maintained in such a condition as to warrant the holding of a permanent permit issued by the Quality Control Department of the Philadelphia Inter-State Dairy Council.

### Method of Payment

For "A" milk delivered at terminal markets, the price shall be computed as follows: Use, for calculating purposes, the regular Inter-State Milk Producers' Association basic and surplus prices for 3.5% milk in that market. There shall be added to this, first, a differential of 6c per one tenth point of butter fat between 3.5% and 4.5% and 8c per one tenth point above 4.5%; and second, a bacteria bonus shall be added to the above which shall be determined as follows: Five bacteria tests shall be made per month for every producer. The highest test shall be discarded and the average of the remaining four shall determine the producers' average bacteria count for the month.

During the months of May, June, July, August, September and October, a producer with an average count for the month (as above mentioned) of 30,000 bacteria or less, shall receive a bonus of 40c per hundred pounds, and a producer with an average count of 100,000 or less, a bonus of 25c per hundred pounds. During November, December, January, February, March and April, the above bacteria bonuses shall be paid to those producers only who have received similar bonuses during three of the previous six months above mentioned, provided that at least one of the three months be July or August. Producers, in addition to the above mentioned, qualifying during the months of November, December, January, March and April for "A" milk bonuses as above described, shall be paid a bonus of 25c per hundred pounds for a bacteria count of 30,000 or less and 15c per hundred pounds for a bacteria count of 100,000 or less.

The "A" butter fat bonus above outlined will be paid to only those farmers qualifying for the above outlined bacteria bonus, and likewise the bacteria bonus will be paid to only those farmers qualifying for the "A" butter fat bonus.

Furthermore, no "A" milk bonuses will be paid to such producers whose milk has scored as high as No. 3 on the Philadelphia Inter-State Dairy Council sediment score card and who, having been warned with respect to this matter, have been found with another such unsatisfactory sediment test score during the same month.



## Economic Conditions and Prospects for the New Year

WILLIAM F. WHITING  
United States Secretary of Commerce

Some of the more important economic forces which dominate the business situation as we enter the New Year are credit conditions, the degree of accumulation of merchandise stocks and of speculation in them the size of the crops and of our current industrial output, the rate of wages and volume of employment, and the prospects of foreign trade.

With respect to credit conditions 1928 has been an extraordinary year. The outflow of gold which began in the autumn of 1927 continued during the first half of 1928 and caused a reversal in the easy money situation that had prevailed for several years. Public attention has been fixed on the rise in the rates on stock-exchange 90-day time loans from 4½ per cent in January to 7½ per cent in the early autumn and the even greater rise in call money rates. It is well, however, to note that bank credit for commercial purposes has been in ample supply at rates ranging from less than ½ per cent higher in southern and western cities to slightly over 1 per cent in New York City while open-market rates for commercial paper have increased by only 1½ per cent during the year.

Agricultural output during the past year was about 5 per cent larger than in 1927 and there was an even greater expansion in manufacturing production, but neither stocks of raw materials nor of manufactured goods have shown any general tendency to accumulate. There is no considerable speculation in commodities and wholesale prices average about the same as a year ago.

Wages continue at a high level and unemployment has been reduced to a minimum. There has been a continued demand for additional workers by mercantile establishments, hotels and the automobile industry and factories have once more been increasing the number on their payrolls. Labor conflicts in the coal and cotton textile industries were settled during the past year and relations in most sections of the labor world are now amicable.

Activity in the automobile and construction industries has been sustained and is particularly noteworthy. Automobile production has been at a higher level in recent months than at any earlier period and contracts for future construction have been substantially greater than in the corresponding period a year ago. Production of many related products, such as iron and steel, cement, gasoline and rubber tires has been stimulated as a result of these developments. The textile and coal industries however, still lag behind the others.

Foreign, as well as domestic, demand for the products of our farms and factories as steadily expanding. During the past year there has been an exceptionally large growth of our exports of finished manufactures—especially automobiles, machinery, and petroleum products.

In general, it may be stated that both industry and trade are exceptionally active as we enter the New Year.

More and more farmers are applying scientific principles to the production of crops and livestock, with the result that it is becoming more difficult for the untrained to prosper on the farm.

## Pennsylvania Dairymen's Association Will Hold Meeting at Harrisburg

The Pennsylvania Dairymen's Association will hold its annual meeting and banquet in Harrisburg, Pa., on Wednesday, January 23rd, during the period of the Pennsylvania Farm Products Show.

A full days program has been prepared, says E. B. Fitts, president of the association. The usual banquet of the association will follow on Wednesday evening.

The morning session will open with an address by Professor Fitts.

Hugh Fergus, Grove City, will tell of "Thirteen Years on a Dairy Farm"; Professor W. J. Fraser, University of Illinois, will explain "Less Work, More Money"; and M. H. Fohrman of the United States Bureau of Dairy Industry, will give pointers on "Improving the Dairy Herd by Breeding."

Following a business session in the afternoon, N. S. Grubbs, Mount Holly, N. J., will discuss "Dairy Barn Improvement"; Edward O. Parker, senior marketing specialist of the United States Bureau of Agricultural Economics, will describe "Methods of Production Essential to High Quality in Hay"; R. R. Gockley, sales manager of the Dairymen's League, New York City, will present "The Importance of Quality in Dairy Products"; and Professor Fraser will explain "Less Expense, More Feed, More Profit."

Dr. Clyde L. King, of the University of Pennsylvania, will be the chief speaker at the banquet. His subject will be "The Economics of the Dairy Situation." Short talks will be given also by Dr. C. G. Jordan, state secretary of agriculture, and Dr. R. D. Hetzel, president of the Pennsylvania State College. Awards will be made to over 800 members of cow testing associations who have succeeded in producing an average of more than 300 pounds of butterfat per cow during the past year, and prizes won in the milk exhibits at the State Farm Products Show will be presented at the banquet.

## Some Questions to Ask Yourself, Mr. Farmer

Mr. Farmer, ask yourself these questions. If you can answer all of them accurately and satisfactorily you are probably prosperous and contented with your lot. If not—well, try to answer them anyhow.

What is the size of your farm business?

What part of your investment is in land, buildings, livestock, machinery, and other capital?

How do your crop yields compare with the average yields of the locality?

What classes of livestock return you the most money?

How do the returns from your livestock compare with the average of your locality?

How many acres of crops do you raise per man? Per horse?

Is your farm so organized that each part of the business is yielding satisfactory returns?

How much have you left for your own labor after deducting from your total receipts your year's expenses, value of labor performed by members of your family, and interest on your investment?

How much does the farm contribute toward your family living?

## Federal Program For Studying Abortion Disease

A program of 14 points in investigations of infectious abortion of livestock was outlined by Dr. John R. Mohler, chief of the Bureau of Animal Industry, United States Department of Agriculture, before the abortion committee of the National Research Council, in Chicago, early in December. Losses estimated at fully \$50,000,000 annually have caused this disease to be the dread of livestock owners, particularly dairymen, and have challenged the ability of scientific investigators to develop improved control methods.

The Bureau of Animal Industry, said Doctor Mohler, carrying on experiments and field investigations described as follows:

1. Experiments to determine the value of abortion vaccines.

2. The development of an improved vaccine safe to use even on pregnant animals.

3. Determination of the immunity afforded by vaccination.

4. The best age at which to vaccinate.

5. Determination, through field investigations, of the feasibility of combating the disease by eliminating or segregating affected animals, based upon the results of the agglutination tests.

6. Determining the practicability of developing a clean herd from an infected one by protecting the progeny from infection, and ascertaining the best method of handling herds to reduce losses while herd immunity is developing.

7. Determination of the best methods of limiting infection and reducing exposure in infected herds where more drastic means of control are impracticable.

8. Determining practical means of keeping abortion-free herds from becoming infected.

9. Studies to determine the part which other infections and factors play in the abortion problem.

10. Studies to determine whether deficiencies in certain vitamins and minerals tend to render animals more susceptible to infection with the abortion bacillus.

11. Determining whether there are other channels of infection than those commonly recognized, and their relative importance.

12. Studies of the reduction of milk flow of cows whose udders carry the abortion bacillus, compared with cows that are abortion free.

13. Experiments in the elimination of udder infection.

14. Studies of the virulence and other characteristics of different strains of the abortion bacillus.

In discussing the practical and scientific aspects of the problem, Doctor Mohler said, "It seems almost certain that abortion losses are to a great degree preventable and will eventually yield to investigation." He suggested that in addition to the Federal investigations outlined, work should be undertaken by a number of qualified institutions with the cooperation of the National Research Council and the department. Proper coordination of the work, he believes, would prevent waste and repetition, at the same time allowing each investigator to deal with his chosen problem in his own way.

In its business session the Council elected the following officers: M. D. Munn, president; J. A. Walker, first vice-president; C. Oscar Ewing, second vice-president; T. A. Borman, treasurer;

C. T. Hayes, assistant treasurer; and C. Bechtelheimer, secretary pro tem.

## Annual Meeting of National Dairy Council

New scientific and educational developments affecting the dairy industry's progress were discussed at the tenth annual meeting of the National Dairy Council at the Palmer House, Chicago, Dec. 6th.

The tremendous increase in population in the United States in the last seven years was pointed out by Dr. C. W. Larson, director of the Dairy Council organization in his report of the year's activities and plans for the future. During the average life-time of a dairy cow, (seven years) the population of the United States has increased as much as the total population of Canada or the combined population of Denmark, Sweden and Norway. During these same years, however, there has been practically no increase in the number of dairy cows in the country, indicating that there has been a large increase in quantity of production per cow. The quality of dairy products has also been greatly improved in recent years.

The average person consumes about 500 pounds per year in the form of milk or cream and about 500 pounds as other products such as butter, cheese and ice cream. There has been a constant increase in the per capita consumption of dairy products, according to Dr. Larson, a large part of which is due to the nation-wide activities of the National Dairy Council and its regional units. Organized council work is now being conducted in four hundred and four cities and the influence of the Dairy Council has extended into every state and nearly every county in the country. During the past year this organization has expended \$720,000 in its efforts to increase the consumption of milk, butter, cheese and ice cream. During the year 9,213,000 pieces of literature including posters, leaflets, health plays and stories were distributed throughout the United States upon the request of teachers, health commissioners, women's clubs and similar organizations.

The value of dairy products was presented in a talk especially adapted for high school students, "The Magic of Milk", by "Happy" Goldsmith.

A discussion of the nutritive value of dairy products by Dr. R. Adams Dutcher of Pennsylvania State College summarized recent investigations on the importance of correct care and feeding of dairy cattle to secure a product rich in important components of the nearest perfect food. Dr. Dutcher pointed out recent studies on the feeding of dairy cows to show the amount of iodine to be found in milk from cows fed balanced rations.

The fundamental place of dairy products in the diet was the basis of a talk by Miss Aubyn Chinn, nutrition director of the National Dairy Council.

"The Pirate Story", a typical health dramatics feature for school children, was given in costume by Miss Louise Everts, Philadelphia Inter-State Dairy Council. The pirate treasures in this case are fruits, vegetables and a bottle of milk. "Listenin' In", a new Council health play for adult groups, presented an unusual lesson in nutrition.

In its business session the Council elected the following officers: M. D. Munn, president; J. A. Walker, first vice-president; C. Oscar Ewing, second vice-president; T. A. Borman, treasurer; C. T. Hayes, assistant treasurer; and C. Bechtelheimer, secretary pro tem.

# SWITZERLAND—IN FOUR DAYS

By R. W. BALDERSTON

One can get but very fleeting and imperfect impressions during a few days' trip in a country so unlike our own as Switzerland. It is like making a critical examination of one or two patches in a patch-work quilt.

We, my wife and I, in four days did have the opportunity to see the farmers with tireless energy harvesting hay with scythe and hand-rake on the steep mountain sides and carrying it on their backs either down or up the mountain to the hand cart or ox cart on the road to be transported perhaps a mile or so to the stable for their cows next winter. We saw the cows in summer pastures high up in mountain meadows at the edge of the eternal snows, (about 8000 feet above sea-level) and we had a beautiful view of the more prosperous farmers in the lowlands with their neat farm buildings and broad fields of grain feeding roots and alfalfa and other hay. In their fields was modern machinery of every kind.

When one enters Switzerland by train the first impression is that of the efficiency and comfort of the Swiss Government-operated Railways. The main lines are largely electrified; the cars are in splendid condition; the road-bed is smoothly ballasted and the schedules maintain accurately at high speed. The water-power furnished by the glacier-fed rivers is now being harnessed not only to operate the Swiss railways and industries, but to distribute in the near future to adjacent countries.

Custom and passport officials of Switzerland are very lenient. Switzerland has learned that tourists are a profitable "crop" to cultivate and everyone makes an effort to encourage you to visit their little country. The halt at the border, therefore, was the least disturbing of any we experienced in Europe.

Every Swiss town seems to be filled with little shops selling Swiss wares, and in every store English seems to be spoken as a matter of accommodation. Moreover the stores are open until about 10.30 P. M. to accommodate trav-

ellers whose time during the day may be taken up in sight-seeing.

The chief products sold in these stores are those which the Swiss people make in their "home industries" during the long winters. A Swiss mountaineer may quite generally be a small farmer in the summer but in winter he works at the watch-making or wood carving trade and cares for his animals in the morning and evening. His family will all help, too, or the girls may be lace makers or embroiderers. Consequently the stores which sell such things as

operate a combination of dairy farming and industrial handiwork that succeeds where either alone would provide insufficient family income.

Grass grows luxuriantly for a few

breeds such as the Simmenthal are not so familiar to us, but they are all of the same large type—1400 pounds for a cow being not unusual at all. They might be called not dual-purpose, but triple-purpose animals; for labor, meat and milk.

It is difficult to cure hay in the swath, windrow or ordinary cock in Switzerland as in many other European countries. Frequent rains cause the hay to spoil much more generally than with us. Consequently under the eaves of every barn are stored many pointed sticks with cross-arms. These are used for foundations for tall pointed haystacks and the hay so draped around them cures in the sun between showers. The Swiss barn and house are for the most part under one roof, and often in close association. Such buildings are generally of frame construction and some have elaborate carved ornamentation on the roof or front gate.



Summer Cabins Used When the Cows are Pastured in the High Mountain Valleys

summer months in the mountain valleys high above the towns and villages. As the snow melts in them in June, the cows are driven up by the herdsmen and herds and caretakers remain away from their home villages until driven down again by the return of snow and frost in the early autumn. In summer milk is made into cheeses in rough stone huts which also serve as the summer camps of the herdsmen. Each cow wears a large bell so that she may be traced as she wanders among the rocks and peaks. The climate is always cool at night because of the altitude, though the sun shines very warmly at mid-day. Cheese of the best quality can be made without fail under such ideal conditions. The departure of the cattle to the mountains in the summer and their return in the autumn are celebrated as village festivals.

Apparently the mountain farmers are cattle breeders and sell their surplus to the farmers in the valleys or for export.

The cattle in Switzerland are all large rugged animals with heavy-boned and well muscled limbs—capable of heavy work. They thrive on rough feed and produce a fair amount of milk. We know the Brown Swiss in America — other



Swiss Cattle must be Triple Purpose—for Work, for Milk, and for Meat

Severe windstorms, we were told, often start disastrous village fires. Landslides and snow avalanches are a frequent menace to a settlement or isolated farmstead. Truly a full portion of hard work and danger are the lot of our Swiss friends. One moves on from a glimpse of Switzerland feeling that he has visited a land of neatness and order and of great beauty of scenery, for the most part unmarred by man. He has met a people of energy, courage, perseverance and kindness.

## Philadelphia Inter-State Dairy Council, Inc., Holds Annual Meeting

The first Annual Meeting of the Philadelphia Inter-State Dairy Council since its incorporation was held in its offices in the Flint Building, Philadelphia, Pa., on December 19th, 1928, Dr. Clyde L. King, presiding.

The farmers group was represented in person, by H. D. Allebach, Frederick Shangle, Robert F. Brinton, Frank P. Willits, A. B. Waddington, E. Nelson James, E. H. Donovan, Robert W. Balderston, I. Ralph Zollers, F. M. Twining, A. A. Miller, J. Albert Fox, Edw. Trimble, and Charles Kirby. The following farmer representatives were named by proxy: S. K. Andrews, J. H. Bennet, Ira J. Book, J. W. Keith, H. I. Lauver, A. R. Marvel, Ivo V. Otto, J. A. Poorbaugh, C. F. Preston, Albert S. Sarig, H. R. Stewart, John Carvel Sutton, C. C. Tallman, S. U. Troutman, R. I. Tussey, Joseph Ashbridge, Kenzie S. Bagshaw, Lloyd Balderston, III; H. H. Bechtel, M. H. Bennet, John C. Bilelow, Frank W. Bodine, J. Howard Brinton, Charles Canby, H. W. Cook, D. S. Croshaw, Howard L. Davis, S. H. Dean, H. L. Grarier, Anson R. Greenwalt, Alfred Hallowell, John W. Henry,

John S. Hershberger, James W. Hopkins, B. F. Hurlock, M. L. Jones, J. H. Kimble, Edgar T. King, Chas. B. Lloyd, H. R. Metzler, Maurice H. Michener, H. A. Moore, Thos. L. Passmore, Frank C. Pettit, Alvin Satterthwaite, Harry V. Schaeffer, Dean Stanton, M. L. Stitt, Wilmer A. Twining, Ross C. Ulrich, E. B. Walton, James M. Warner, and W. B. Wickersham.

The milk distributors' group was represented by the following: Supplee-Willits, Jones Milk Co., Henry W. Woolman, George Hauptfurrer, Harry Halliday and twenty-four proxies. Abbotts Dairies Inc., Edw. McMahon and ten proxies, Harbison's Dairies, Robert J. Harbison, Jr., F. W. Elzey and six proxies; Scott-Powell Dairies, Dr. Thomas Kelley; Castanea Dairy Co., A. M. Woodward, B. M. Woodward, and three proxies; E. A. Baldwin, Frank Baldwin and two proxies; Breuninger Dairies, by Henry Breuninger; St. Lawrence Dairy Co., represented by Daniel S. Adams. Proxies were also received from the Galliker Ice Cream Co., and the Wawa Dairy Farms.

These representatives represented the

full voting strength of the Philadelphia Inter-State Dairy Council under its recent form of incorporation.

Following the call to order the secretary, Robert W. Balderston, read the minutes of the last meeting, which were approved. The secretary presented the annual report of the Council, (a copy of which was printed in the December issue of the "Milk Producers' Review") which was also approved. The Budget for the coming year was presented and adopted.

A report of the operation of the Quality Control Department of the Dairy Council was presented by Mr. Balderston, a general report of the work of the department during the past year was outlined and some of the features of its proposed future program was discussed. Special reference was made to its experimental and research work in connection with the milk supply. After a general discussion, Mr. Cohee, as Director, was instructed to proceed in an experimental way with the "Direct Count" Bacteria Investigation.

Election of Directors  
The Dairy Council then proceeded with

the election of Directors to serve for the ensuing year. The following were elected: H. D. Allebach, Robert F. Brinton, E. H. Donovan, William Griscom, Robert J. Harbison, Jr., E. Nelson James, Dr. Clyde L. King, C. M. T. Laudenslager, Edward McMahon, Harry Scott, Frederick Shangle, A. B. Waddington, F. P. Willits, B. M. Woodward and Henry Woolman.

Various problems of educational work were discussed and the continuance of the "Milk Drivers' School", Country Plays, Cooking Demonstrations, Publicity Programs, etc., be continued.

## Directors Organization Meeting

The Directors of the Philadelphia Inter-State Dairy Council held at the close of the general session, a meeting for organization and election of officers to serve for the ensuing year. The following were elected:

President, Dr. Clyde L. King; Vice President, H. D. Allebach; Secretary, Robert W. Balderston; Asst. Secretary, C. I. Cohee; Treasurer, Robt. J. Harbison, Jr.; Asst. Treasurer, George Hauptfuhrer.



## INTER-STATE MILK PRODUCERS' REVIEW

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The Inter-State Milk Producers' Association, Inc., through its official organ, "The Inter-State Milk Producers' Review," extends to its members and to all of the readers of the "Inter-State Milk Producers' Review," its best wishes for a Happy and Prosperous New Year.

A great measure of the associations success, during the past year has been due to the spirit of cooperation and fair dealing evidenced by the membership on the whole, as well as on the part of the cooperating buyers of our product and it is hoped that this may combine and grow, year by year, so that the continued success of the association, as well as those in the industry with whom we are cooperating, may be assured.

No matter what State you may live in many benefits can be obtained by attending all the local, county and state Farm Products Shows.

Two major state shows will be held during the present month, the Pennsylvania State Farm Products Show, to be held in Harrisburg, Pa., January 22nd to 25th, 1929 inclusive, and the New Jersey State Farm Products Show to be held in Trenton, N. J. on January 15th to 18th, 1929.

Agriculture, from every angle may be studied by the farmer at these two great shows.

During these weeks, at each of these respective shows many meetings of State agricultural organizations will be held.

Visit these shows, both of them if possible, attend the various agricultural organizations' meetings that you may be interested in and take an active part in their work. We feel sure that you and your agricultural methods will be benefited by it.

For many years efforts have been made by the Inter-State Milk Producers' Association to establish a uniform classification for "A" milk and a uniform method of payment for bonuses for such grades of milk.

Recent conferences with cooperating buyers have finally brought this about and we are publishing in this issue of the "Milk Producers' Review," a definition and prices applying to this grade of milk. The new basis becomes effective on February 1, 1929.

This new basis has been the result of an extensive study of the grade "A"

milk situation and it is believed that, it is fair to both producer and buyer and that the unification of the system of production and buying will be for the best interests of all concerned.

It is a matter of satisfaction that the confusion in the market for "A" milk due to differences in plans for payment, will be eliminated by the results of the conference. The association has worked long and faithfully on this problem.

### Selling Plan Modified

In order to aid some of our members who are starting as new shippers during the next four months, the following amendments to the Philadelphia Selling Plan have been agreed to—That all new shippers starting to ship to cooperating dealers during the next four months shall, during January, February, March and April 1929, establish a basic quantity calculated by taking 70% of their first 30 days' shipments. This will be the basic quantity until October 1st when it will be established in accordance with the Philadelphia Selling Plan as regularly announced. Otherwise the selling plan has not been changed.

"Bootleg" Oleo Unlawful  
"Bootlegging" oleomargarine is the latest unlawful practice to be brought to light by the Bureau of Foods and Chemistry, Pennsylvania Department of Agriculture.

The scheme is simply this: In order to avoid paying the license fee required by law of all places selling oleomargarine, solicitors and demonstrators make a house-to-house canvass selling the product, usually giving the impression of being employed by a local retail dealer who has a license to sell the product. This employment is accomplished by the licensed dealer paying the agent a small per diem fee.

"This is a camouflage and is unlawful," asserts Dr. James W. Kellogg, director of the Bureau. "Under the law, both the place and the dealer are included when an oleomargarine license is issued and solicitors and demonstrators cannot be classified as regular employees of licensed dealer who purposely enters into a contract which permits an agent to avoid the provisions of the law, will be held accountable."

### Records Tell Dairy Story

Keeping milk production records of dairy cows is important. In no other way can the dairyman tell which cows are best and just how good or poor each one is. If weighing the milking each time is too much work, then the night and morning milk can be weighed one day a month and multiplied by the number of days in the month. Keep the records in a book and at the end of the year you will have some very valuable information of your herd.

### Start Farm Accounts

With the beginning of the new year, a resolution that will pay well is the decision to keep cost accounts on the major farm operations. Information on the practices used will point the way to changes to reduce costs of production and increase profits. Ask your county agent about getting a book and starting the new year right.

## Market Conditions

H. D. ALLEBACH

There is an important item to report with respect to developments during the past month—of the standardization of the definition of "A" milk as produced in this market and bonuses to be paid for the same. During the past four or five years sales of "A" milk have increased very materially until 1/3 of all the milk handled in the Philadelphia Milk Shed has been sold as "A" milk.

Therefore, at the present time the problems connected with the "A" milk market are of great importance to a large number of the members of the Association. There has, quite naturally, developed much lack of uniformity and even of confusion in the marketing of this particular class of milk. This is due to the fact that every buyer of this product has been buying it on an individual basis, both with respect to standards for butter-fat and standards for bacteria count. Differences as to bonuses paid to farmers have resulted in wide variations in actual prices paid to producers.

Our organization for sometime has been trying to get the buyers together and set a standard for "A" milk. At each conference, some progress has been made. Finally on Friday, January 4th, distributors buying and selling "A" milk met in the conference room of the Association and agreed to standards for "A" milk for the Philadelphia market and prices that will be paid our members for it. A detail of the plan, including standard definitions and bonuses will be found on page one of this issue of the "Milk Producers' Review". The butter-fat standard was the most difficult part of the problem to iron out and standardize so that it would be such as everyone would agree to. The average test of "A" milk as sold on the streets of Philadelphia and surrounding territories is above 4%. Realizing that large quantities of milk at receiving stations is of good quality yet below 4% in test, it was finally agreed to fix minimum butter-fat standard at 3.7% in the requirements for "A" milk at receiving stations.

The important matter of specifications for maximum bacteria count and bonus to be paid for low bacteria count received quite a bit of discussion. That which was agreed upon and is outlined in the specifications, was felt to be in the long run, the most fair to our farmers.

We believe that it will be quite a help to our members and of positive value to be able to quote monthly in the "Milk Producers' Review" the prices for "A" milk, and also to have for distribution a standard set of specifications covering "A" milk production.

### Slight Change in Selling Plan

At the above mentioned meeting with the buyers we discussed one of the provisions of the Philadelphia selling plan. Realizing that for a new shipper to start on a fifty-fifty basis during the first four months of the year would penalize him severely, we have changed this provision of our regulations. As amended, it reads as follows:

"That all new shippers starting to ship to cooperating dealers during the next four months shall, during January, February, March and April 1929, establish a basic quantity calculated by taking 70% of their first 30 days' shipments.

This will be his basic quantity until October 1st, when it will be established in accordance with the Philadelphia selling plan as regularly announced. Otherwise the selling plan has not been changed.

### General Market Conditions

The supply of milk during December was just about sufficient for the demand. We believe at present, the production and sales are running along very nicely. Surplus prices will be paid for the month of January.

### December Milk Prices

All milk shipped to cooperating buyers under the Philadelphia Selling Plan will be paid for at basic prices. The payment of milk on a surplus basis has, during November and December 1928, been eliminated.

Grade B<sub>1</sub> market milk, three percent butter fat content, delivered f. o. b. Philadelphia, during December is quoted at \$3.29 per hundred pounds.

The price of basic milk three per cent butterfat content, delivered at Receiving Stations in the 51-60 mile zone, during December is quoted at \$2.71 per hundred pounds. The usual butterfat differentials and freight rate variations applying at other mileage points in the territory, are shown by quotations on page 5, of this issue of the "Milk Producers' Review."

### December Butter Market

The month has seen a decline of 3½¢ in the price of 92 score, solid pack butter. There were two definite declines, and at the lower price ranges there was little stability given to the market.

While prices ranged fairly steady at the opening of the month, buyers were wary and there was little bid hand to month buying. At times during the decline there was considerable movement from storage and the added surplus from the daily make did not strengthen the market.

Buyers generally have held off and the declines from time to time were largely due to forced selling. Extreme nervousness has been apparent almost throughout the month with a greater disposition to sell than to buy.

The statistical position issued by the Bureau of Agricultural Economics on December 17th showed storage stocks of the country to be 71,054,000 pounds as compared to 83,224,000 pounds one year ago, and 74,940,000 pounds, the five year average. During the first 19 days of the month storage stocks were 7,566,000 pounds, as compared to 10,828,000 pounds during the same period one year ago.

The movement in foreign butter has been light, some few shipments have arrived but the bulk of the butter went into bonded warehouses, waiting future marketing. Further importations are expected during the coming month.

The price of 92 score solid packed butter, New York City during the first 11 days of the month was 52¢ a pound, a break to 50½¢ cents followed and held for about a week. Prices then became a bit irregular with a further decline of a cent to 49½¢ and closed at the end of the month at 48½¢.

There being no milk sold in the Philadelphia Milk Shed at a surplus price, the necessity of quoting such prices for December is eliminated.

## LATEST MARKET PRICES

### PHILADELPHIA SELLING PLAN

The prices quoted below are those to be paid for "B" milk by all cooperating dealers for shipment during the month of December, 1928. At a conference held on November 5th, 1928, between the Inter-State Milk Producers' Association and the cooperating dealers, it was agreed that all milk purchased during the months of November and December, 1928, should be paid for at full basic prices. Surplus prices therefore, no not apply during those two months.

The following quotations are based on 3 percent butterfat content milk and a differential of 4 cents for each tenth point and 2 cents for each half tenth point up or down, and are for all railroad points. (Inland stations carry differentials subject to local arrangements).

INTER-STATE MILK PRODUCERS' ASSOCIATION PRICES

This price list is issued with the understanding that it is net to the producers and that all buyers using it as a basis of payment to producers, shall in addition thereto make the following contributions and payments:

(1) To the Philadelphia Inter-State Dairy Council 2¢ per 100 pounds (46½ quarts) of all milk purchased from any producer at prices listed herein.

(2) To the Inter-State Milk Producers' Association 2¢ per 100 pounds (46½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2¢ per 100 pounds (46½ quarts) of all milk bought from other producers at prices listed herein.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed, for improvements and stabilization of markets and for an educational campaign advertising the food value of dairy products.

BASIC PRICE December

F. O. B. Philadelphia Grade B Market Milk

100 lbs. Per Qt.

3.29 7.1

3.05 6.7

3.1 6.8

3.15 6.9

3.2 7.0

3.25 7.1

3.3 7.2

3.35 7.3

3.4 7.4

3.45 7.5

3.5 7.6

3.55 7.7

3.6 7.8

3.65 7.9

3.7 8.0

3.75 8.1

3.8 8.2

3.85 8.3

3.9 8.4

3.95 8.5

4.0 8.6

4.05 8.7

4.1 8.8

4.15 8.9

4.2 9.0

4.25 9.1

4.3 9.2

4.35 9.3

4.4 9.4

4.45 9.5

4.5 9.6

4.55 9.7

4.6 9.8

4.65 9.9

4.7 10.0

4.75 10.1

4.8 10.2

4.85 10.3

4.9 10.4

4.95 10.5

5.0 10.6

5.05 10.7

5.1 10.8

5.15 10.9

5.2 11.0

5.25 11.1

5.3 11.2

5.35 11.3

5.4 11.4

5.45 11.5

5.5 11.6

5.55 11.7

5.6 11.8

5.65 11.9

5.7 12.0

5.75 12.1

5.8 12.2

5.85 12.3

5.9 12.4

5.95 12.5

6.0 12.6

6.05 12.7

6.1 12.8

6.15 12.9

6.2 13.0

6.25 13.1

6.3 13.2

6.35 13.3

6.4 13.4

6.45 13.5

6.5 13.6

6.55 13.7

6.6 13.8

6.65 13.9

6.7 14.0

6.75 14.1

6.8 14.2

6.85 14.3

6.9 14.4

6.95 14.5

7.0 14.6

7.05 14.7

7.1 14.8

7.15 14.9

7.2 15.0

7.25 15.1

7.3 15.2

7.35 15.3

7.4 15.4

7.45 15.5

7.5 15.6

7.55 15.7

7.6 15.8

7.65 15.9

7.7 16.0

7.75 16.1

7.8 16.2

7.85 16.3

7.9 16.4

7.95 16.5

8.0 16.6

8.05 16.7

8.1 16.8

8.15 16.9

8.2 17.0

8.25 17.1

8.3 17.2

8.35 17.3

8.4 17.4

8.45 17.5

8.5 17.6

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## Who Wants to Be the Milkman? Life Seems to Be a Merry One\*

Tends Furnaces, Catches Burglars, Acts as Family Alarm Clock and Gets Free Breakfast. But He and His Horse Also Know a Thing or Two About Grouchy and Impolite Customers



Finding the Keyhole

There are some who depend on him as an alarm clock. Others trust him with a latchkey so that he can place his milk in the icebox. There are those whom he never sees, save on collection days; who write notes and tuck them in empty bottles, the courteous "please" and "thank-you" or lack of such, speak volumes for their character.

The milkman knows his customers far better than his customers know him. He knows where there will be an apple waiting for his horse when he arrives, and he knows where he will receive a scolding if he is five minutes late. The day has a poor start if the milkman fails to arrive.

Close to the "zero" hour—about 2 A. M. is the time—the milkman starts his route. Traffic is at its lowest ebb, and only the night watchman, the police-

for the day except on Mondays and Tuesdays when collections are made.

Old Dobbin is the milkman's best friend. A horse knows its master's stops as well as he does; and this even



His Best Friend

though the milkman has it in his mind "the third house from the lamp post on the right hand side" or "the second house from the corner." Early morning darkness does not permit reading house numbers.

Perhaps he serves daily one thousand quarts of milk to several hundred customers. Many of these orders are standing but many constantly are changing. The bulk of this detail must be carried in his head. A veteran milkman declares an experienced worker can remember practically everything but when to fill a standing order for milk every other day.

This every-other-day customer it seems, is the bane of his existence, giving rise to the almost daily question, "Did I leave it yesterday, or didn't I?" As a result most milkmen will endeavor to persuade such customers to take either three or four bottles a week, that deliveries can be made on set days.

If the milkman has one message for



All Part of the Life

man, the occasional night worker or late reveler is on the street. By the time the city is awake, most of his work is done. Before 11 o'clock he is generally through



A Brown-Paper Note

his customers, it is, "Please don't write notes on brown wrapping paper!" "So many housewives do it," said

one milkman. "And often with a blunt pencil. These orders would be hard enough to read in broad daylight, but try and do it at 3 o'clock in the morning."

"A man always has trouble reading these notes until he gets to know his customers. In some sections we get them written in Yiddish, Italian, German, French, and most everything. A milkman, to be a success in these sections, has to be a linguist. I know several who can speak half a dozen languages."

It is not unusual for customers to prevail on the milkman to perform early morning chores. Some look on him as a sort of public utility or neighborhood factotum.

A former milkman, now in the sales department of a large company, describing his former route said:

"One family depended on me to wake them every morning. I did it faithfully for two years, until I met with an accident and was off for a few days. The man of the house started to bawl me out when I got on the job again, blaming me because he had been late for work."

"At another place, a tearoom, I was accustomed to light the gas under the coffee urn. In one house I opened the draft on the furnace, closed a bedroom window and started the coffee pot. One woman always laid an apple beside the empty bottles for my horse, and another a bun. If they neglected to leave these tidbits, it spoiled my horse's morning."

"One rainy morning when I was collecting a bill an elderly lady insisted I come in and dry my clothes and have some breakfast. She told me she didn't want me to pass her house after that without taking breakfast. If I failed to do so she wanted to know the reason why. So her house became a regular stop for breakfast."

"And of course, there were a number of 'grouches' on the route. If I was as much as five minutes late I was in for

it, rain, shine, or snow three feet deep. I remember a woman living on the sixth floor of an apartment house as the most troublesome customer. Her order was never the same, and you could never guess it from one day to the next. It invariably meant I had to climb the six flights to read her note and then make another trip to fill the order."

"I've helped 'drunks' into their houses and gotten bawled out by their wives."



"Bawled Out"

Once I caught a burglar about to break into a store and held him until a policeman arrived on the scene, by pressing my electric torch against his back and telling him it was a revolver.

"On another occasion I was taken for a burglar. I was forced to stand still by an angry man, who pointed a gun at me from a second-story window while the real burglar crawled away on his hands and knees. By the time a policeman came along and identified me the burglar had escaped."

Many wonder why the milkman has to deliver so early in the morning. What difference it would make if he came later in the day? An official of a company declared competition was the chief reason, causing individual companies to get their wagons on the road at the earliest possible hour for fear of losing business.

Daylight delivery, with the possibility of enjoying normal hours of recreation, time with one's family and escaping from the hardship of a winter's morning, when he is the first to break the snow-covered roads, is the stock dream of all milkmen.

\*Reprinted from an article in "The Philadelphia Evening Bulletin."

### Good Feed Brings Profits

Full-fed cows give brimming pails of milk. Feed liberally, yet carefully, of balanced rations, says State College Dairy specialists. It pays well to buy high protein feeds such as cottonseed meal or linseed oil meal to mix with home-grown corn, oats, barley, and buckwheat.

#### Preventing Feed Taints in Milk

The milk inspector may feel that feed flavors and odors in milk are not of interest from a public health standpoint, but anything that decreases the adequate use of milk in the diet has a deleterious effect on human nutrition and welfare. It is a well-known fact that when milk contains abnormal flavors, its use is decreased, and perhaps temporarily discontinued.

Much may be done by dairy inspectors to inform farmers how such flavors in milk may be avoided. A perusal of Department of Agriculture Leaflet No. 25, entitled "Preventing Feed Flavors and

Odors in Milk," will be enlightening. This leaflet is recently off the press and summarizes briefly in popular form the results of several years experimental work. These experiments were conducted by feeding dairy cows various quantities of highly flavored feeds and noting the effect on the milk.

The leaflet discusses the effect of these feeds and the methods of feeding cows and handling the milk to decrease or eliminate taints. The general conclusions are that (1) all feeds likely to cause abnormal flavors and odors should be fed just after milking, (2) cows and barns should be kept clean, (3) stables should be properly ventilated, and (4) milk should be properly aerated and cooled.

If you have not obtained a copy of this leaflet, request one from the Office of Information, United States Department of Agriculture, Washington, D. C. Be sure to specify the number and title of the publication desired.

### New Jersey 4-H Club Boys and Girls Win Prizes

More than 100 boys and girls of the Mercer County, New Jersey 4-H Clubs attended the second annual club work convention in Trenton, N. J., on December 22nd.

A feature of the convention was the awarding of prizes for meritorious work.

Three gold medals were awarded as follows: Carl Schmidt, Ewing, a member of the Better Dairy Club, whose Holstein made the highest production of any in the "Trenton Times" contest this year. She has exceeded the requirements for a gold medal by 3,614 pounds and the month of December still to be credited to this total. Howard Stelle, Dutch Neck, made the second highest production record with Doede Alcartra Glista, a Holstein cow. Chester Tindall's animal, Gertrude Valdessa Korn-

dyke, also a Holstein exceeded the gold medal requirements by a few hundred pounds.

Among the silver medal winners were Hazel Atchley and George Tindall. Both of these received bronze medals last year and entered their animals again this year, receiving the next highest award. Sarah Atchley, Harbourn, is also a silver medal winner. A bronze medal award was made to Sunset Hill Anggie Topsy, owned by Hazel Atchley, Harbourn, who is the only club member so far to receive two medals in one year.

Following the awarding of the medals, a program of special interest to the club members was carried out. Miss J. Katherine Francis, home demonstration agent, told of the results of last year's convention, June Swift, Titusville, related her achievements during the past year, and Margaret O'Connell, of Pennington, told of the work of the flower club of which she belongs.



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House Until You Get  
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Why

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Before you spend a dollar on plans, material or equipment for building, remodeling or improving any farm building, get this FREE Book and see how Jamesway helps farmers save a lot of money on materials and construction.

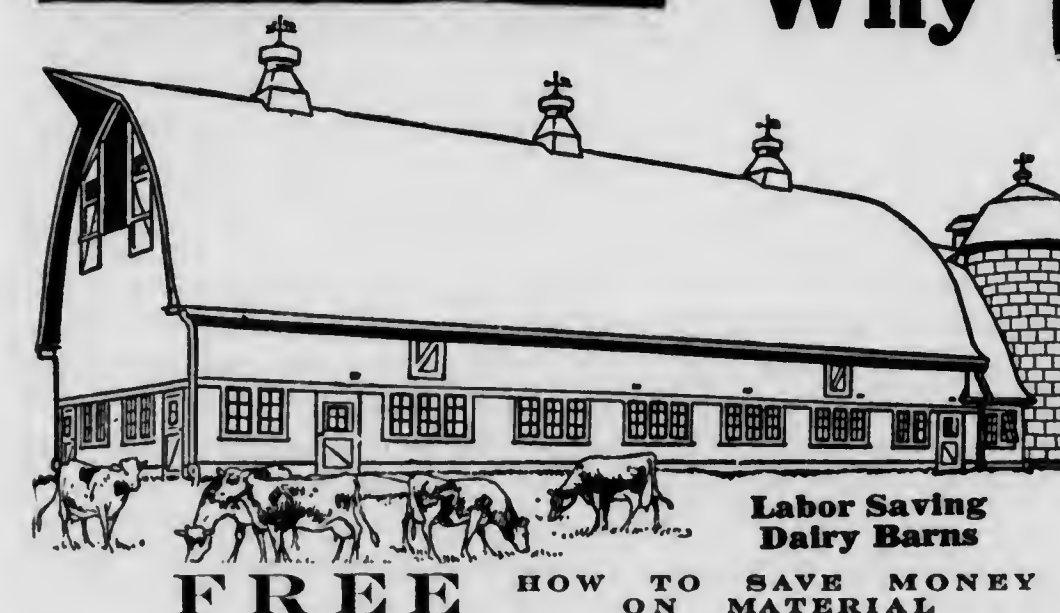
It makes no difference what kind of changes or improvements you are planning in any farm building, this Jamesway book will show you the most economical way and save you a lot of costly mistakes.

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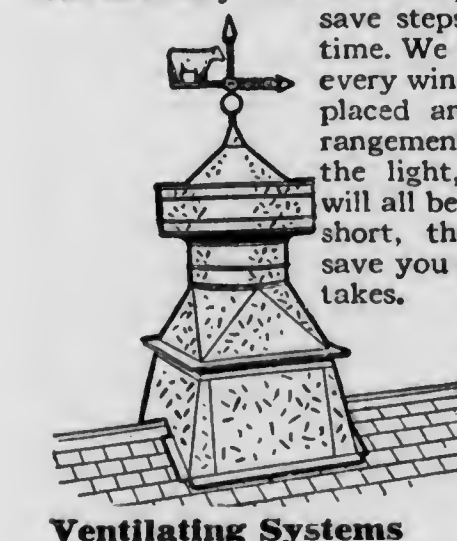
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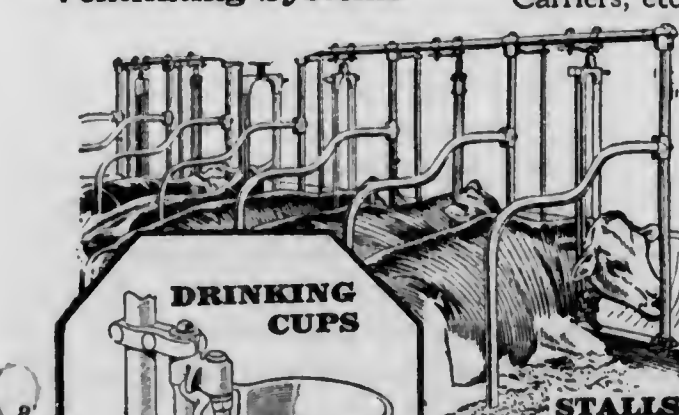


FREE HOW TO SAVE MONEY ON MATERIAL

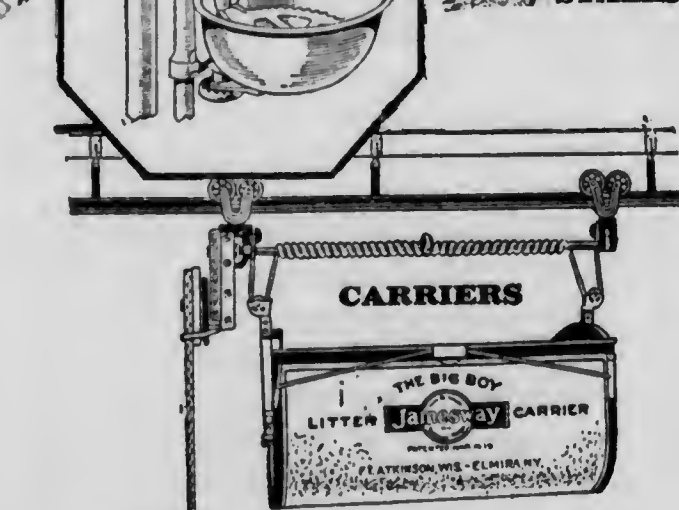
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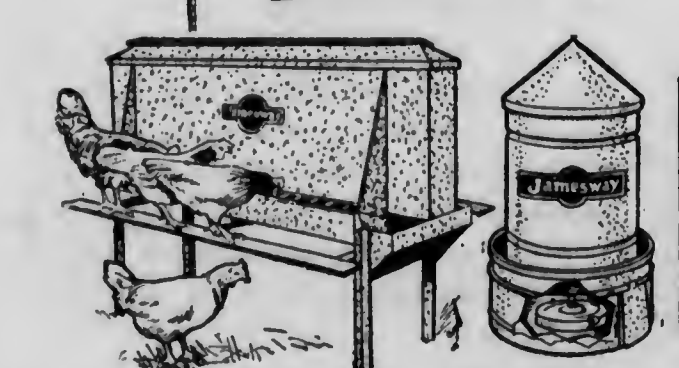
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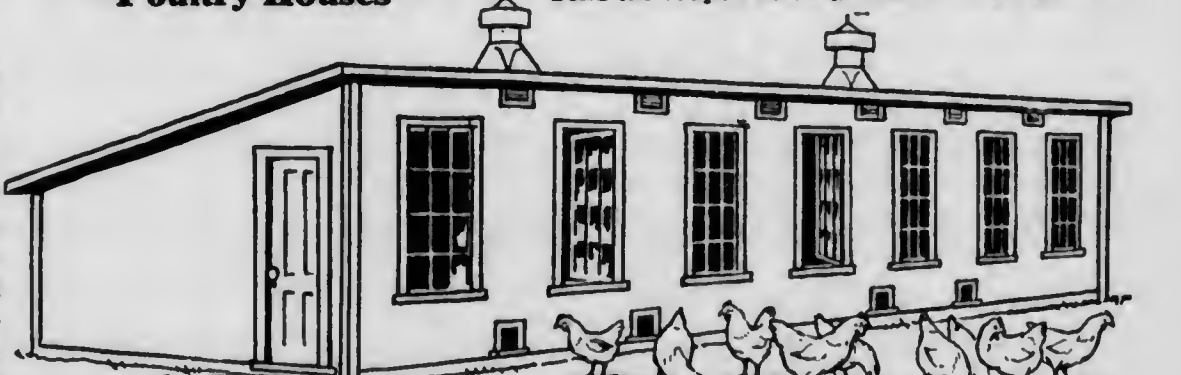


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Our FREE Book also tells about the complete line of Jamesway Equipment—Stalls, Stanchions, Drinking Cups, Litter Carriers, etc., for the cow barn. Troughs, Waterers, Pens for the hog houses. Feeders, Nests, Waterers, Incubators, Brooders and Baby Chick Equipment for the poultry house. Here again our extensive experience in designing and manufacturing enables us to put out BETTER designed—MORE practical—LONGER lasting equipment for the cow, the horse, the hogs or the hens. Jamesway offers you the most complete line of every kind of labor-saving, money-making equipment for any farm building. That's why Jamesway equipment always gives better service and costs less in the long run. Get our FREE Book and see for yourself.

### Time Saving Money Saving Hog and Poultry Houses



Complete Ventilation Systems for Barns and Poultry Houses

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Mail the coupon today to our office nearest you. Learn all about Jamesway's complete service—How the local Jamesway man in your locality will give you the benefit of his help and experience without obligating you. Check on the coupon what you are interested in—whether building, remodeling, ventilating or equipping a cow barn, horse barn, hog or poultry house, and we will send you the Jamesway Book that tells you just what you want to know.

### James Manufacturing Co.

Dept. 5935  
Ft. Atkinson, Wis.      Elmira, N. Y.  
Minneapolis, Minn.

#### Mail Coupon to Office Nearest You

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Please send me your NEW Jamesway BOOK. I am interested in  
☐ Building    ☐ Remodeling    ☐ Equipping    ☐ Ventilating  
☐ Cow Barn    ☐ Horse Barn  
☐ Hog House    ☐ Poultry House

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Post Office .....

R. F. D. .... State .....



## DAIRY COUNCIL SERVICE

The various departments of the Dairy Council are at your service and will assist you in planning

### Educational Entertainment

for your Community, Local or Club Meeting.

The Dairy Council has carried the message of "Milk for Health" to hundreds of thousands of producers and consumers in the Philadelphia Milk Shed.

### Lectures and Speakers on Health Programs ARE AVAILABLE

### Motion Picture Films on Dairy Subjects Lantern Slides Literature Posters

### Short Plays for the Children, etc.

ARE YOURS FOR THE ASKING

Write us for detailed information and programs

### Let Us Assist in Planning Your Entertainment

## Philadelphia Inter-State Dairy Council

R. W. BALDERSTON, Secretary

FLINT BUILDING

219 North Broad Street

Philadelphia, Pa.

### Penna. Farmers and Dealers Selling Seed Must Comply with State Laws

Dealers and farmers expecting to sell farm seeds in Pennsylvania next spring should get tests made and labels ready now to avoid delay. This is the timely advice of the State Bureau of Plant Industry.

All dealers offering agricultural seeds for sale for seeding purposes must attach to each package weighing 10 pounds or more a label giving: (1) the commonly accepted name of the seeds; (2) the percentage, by weight, of impurity; (3) the percentage, by weight of weed seeds; (4) the name and number per ounce of noxious weed seeds; (5) the percentage of germination of the seeds, with date of test; (6) the name and address of the vendor.

The following weed seeds are declared as noxious: wild onion or garlic, quack grass, doddars, Canada thistle, devil's paint brush, king devil, perennial sow thistle, horse nettle, bindweed.

It is unlawful to sell, offer or expose for sale or distribution any agricultural seeds, or any mixture of the same, for seeding purposes, when the seeds or

mixtures shall contain more than three per cent by weight, of weed seeds, or shall contain one or more seeds of dodder or one or more seeds of Canada thistle to five grams of such seed or mixture.

These provisions apply to every person or firm offering seed for sale for seeding purposes, farmer and professional dealer alike. Farmers may sell seed in bulk to dealers without the label.

Anyone may test his own seed but will be held responsible for the accuracy of the tests. Should the inspector find the seed not to be as represented, the seller is liable to prosecution and fine.

Samples may be sent to the Seed Analyst, Bureau of Plant Industry, Harrisburg, Pa. The law fixes a fee of twenty-five cents per sample and fees should accompany the samples.

The seed should be thoroughly mixed so that the sample taken from it, is representative of the lot. The value of the test rests on the careful taking of the sample which should consist of from two to four ounces.

### The Dairy Industry in the United States\*

"The results of research have already had a considerable influence upon the consumption of milk and dairy products in this country and this undoubtedly has had a beneficial effect upon the general health and welfare of our people.

"Milk and dairy products each year are becoming a greater part of the diet of the American people. The yearly per capita consumption of milk in fluid form was estimated at 42.4 gallons in 1917. In 1926 the estimate was 55.3 gallons. The per capita consumption of all our dairy products has been, on the whole, decidedly upward.

"Reduced to total milk used for all purposes, it has been calculated that while in 1917 we used 836 pounds per person, in 1927 we were using 1082 pounds—a gain of 196 pounds in ten years. Expressed in terms of value of product it may be stated that out of every dollar that the American family spends for food 20 cents, or one fifth, is spent for dairy products.

#### Size of the Dairy Industry

"The farm value of the milk and dairy products produced in the United States in one year is in round numbers three billion dollars. This is nearly twice the value of our annual corn crop. It equals the combined value of our cotton crop and our hog crop. The farm value of all crops for 1926 was \$3 billion dollars. Of this 26 per cent. was supplied by the dairy cow.

"The wholesale value of all motor vehicle production in the United States and Canada for 1926 was not so great as the farm value of the products of our dairy cows.

#### The Dairy Cow as a Soil Improver

"The dairy cow gives back to the soil more than 75% of the nitrogen and nearly 90% of the mineral matter contained in the feed she eats. Furthermore, the growing of legumes, the ideal feed for the dairy cow, takes the nitrogen from the air and makes use of it in plant growth. The dairy cow therefore holds a very important place in soil improvement.

#### Some of the Problems of the Industry

"While our industry is now on a sound economic basis, it is readily seen that a moderate increase in production without a corresponding increase in demand might have the effect of upsetting the entire industry. This emphasizes the importance of efficiency in production. There will be little danger of overproduction if we produce more economically. The efficiency of the producing unit, whether it be the cow, the farm or the man, is by far the most important problem confronting the dairy industry. An organization such as yours, therefore, should not expend all its energy in the marketing of the product. Attention must be given to efficient production.

"In the manufacture and distribution of dairy products as well as of those in other industries, there is a tendency toward consolidation and combinations avowedly for the purpose of lowering the costs of operation and for general increased efficiency in the business. As I size up the situation this same principle must be utilized by the producers of milk. Your organization can assist in this work by using its influence to increase the number of dairy-herd-improvement associations and to bring about the production of milk of high quality through some group method, either by inspection or by education.

If we are to keep our industry on a stable basis, attention must be given to our production problem.

"Within a circle having a radius of 50 miles and with Philadelphia as the center, there are 16 dairy-herd-improvement associations enrolling 8776 cows out of a total cow population of 228,160. According to these figures only 3.8 per cent of the cows within this area have known records on which to determine their efficiency in production.

"The production per cow may be further increased by the use of better sires. By culling out the poor cows and using good sires, the dairyman can materially increase his income from the dairy enterprise on his farm.

#### Importance of Quality

"I cannot stress too much the importance of quality in dairy products. There is a direct relation between quality and consumption of dairy products. In my opinion, the greatest marketing advantage held by such organizations as yours lies in the quality of your product. A milk of low quality is always difficult to dispose of to advantage whereas milk of good flavor and odor always influences the consumer to use this food commodity in greater amounts. The farmer is responsible for the quality of the product as it comes from the farm. The manufacturer and distributor are responsible from that point on until it reaches the consumer."

\*From an address by O. E. Reed, Chief of the Bureau of Dairying Industry, U. S. Department of Agriculture, at the Annual Meeting of the Inter-State Milk Producers' Association, November 23rd, 1928.

### Cattle Price Cycle Now Near the High Point

An explanation of the present relatively high price of beef and beef cattle appears in the annual report of the Secretary of Agriculture. "Records of the last 28 years show," Mr. Jardine writes, "that under normal business conditions the prosperity of the cattlemen in this country varies inversely with the per capita supply of beef available for consumption. A yearly supply in excess of 61 pounds per person tends to depress cattle prices to such levels as to force liquidation. On the other hand, a per capita supply maintained at or below that amount will bring a rise in prices. In 1926 the per capita supply of beef amounted to 68.3 pounds. In 1927 it dropped to 58 pounds, and average cattle prices advanced 18 per cent. For the current year the per capita supply will probably not exceed 54 pounds, and will be the smallest for any year for which records are available. As a result average prices for cattle during the first eight months were 27 per cent higher than in 1927 and 44 per cent above those in 1926."

As regards the future, the report continues: "The cattle industry has a definite cycle averaging from 14 to 16 years. Apparently it is now near the low point of the production cycle and the high point of the price cycle. Previous similar points occurred in 1912 and in 1898. It requires three to four years to sufficiently increase beef supplies through restocking and herd expansion to make production unprofitable. Since the population of the country is increasing at the rate of more than 1,500,000 annually, the general outlook for the cattle industry is extremely favorable."

## Cow Testing Associations

There were 61 associations reporting in Pennsylvania for the month of October, 1928. The total number of cows reported was 20,513. Of this number 1898 cows produced more than 40 pounds of fat and 2286 gave more than 1000 pounds of milk.

Of the 40 pound group 563 cows produced more than 50 pounds of fat and 1124 cows gave more than 1200 pounds of milk. During the month 223 unprofitable cows were sold and 35 bulls purchased.

Among the total number of associations reporting, the following were from counties in the Inter-State Milk Producers' Association territory.

Name of Assn.	Tester	Cows Producing		
		Tes'd	Fat	Milk
Bedford	Ray Sellers	322	76	17
Northern Berks	Jas. Egelman	435	35	85
Blair	G. L. Mowry	368	28	30
Bucks No. 1	Clarence Daniels	438	57	76
Bucks No. 2	Nervin Weller	347	34	39
Carbon Lehigh	H. Chamberlain	—	—	—
Chester Valley	W. H. Shingle	527	41	26
Oxford	Royden Chandler	448	37	31
Conover	L. R. Shingle	—	46	57
West Chester	S. W. Stiles	—	—	—
Cumberland No. 1	A. A. Randabaugh	410	64	88
Cumberland No. 2	J. P. Shuehart	253	79	52
Dauphin	G. J. Hock	—	—	—
So. Franklin	R. G. Miller	365	11	15
W. Franklin	Blair Kaufman	216	17	25
Huntingdon	Jno. Chenoweth	373	13	18
Juniata	G. C. Hummer	307	23	55
Garden Spot	Luke W. Martin	133	21	48
Lebanon	Cyrus J. Forney	394	31	56
Montgomery No. 1	F. E. Martin	446	43	65
Montgomery No. 2	Lee McCauslin	458	28	28
Mifflin	D. C. Drake	303	65	33
York (Northern)	W. F. Schaefer	264	23	22
York (Southern)	J. R. Kilgore	266	29	45

### Bradford County Cow Testing Association

Ray Sellers, Tester L. R. Mollenauer, County Agent

The Bedford County (Pa.) Cow Testing Association finished its fourth year December 1st, 1928, with 28 whole year and four part year members. There were 420 cows in the Association during all or part of the year.

The registered Jersey herd belonging to Allen R. Eshelman again leads the Association in production of butterfat with 492.2 lbs. in 7646 lbs. milk. The registered Jersey herd belonging to E. S. Perry is second in production of butterfat with 428.9 lbs. in 7646 lbs. milk. These herds are closely followed by four other herds in the association with an average production of over 400 lbs. butterfat, mentioned elsewhere in this report. There are twenty herds with a production of over 300 lbs. butterfat.

The grade Jersey cow Susan, seven years old belonging to George Morgart leads the association in production of butterfat for individual cows with a production of 708.7 lbs. in 12,716 lbs. milk. The registered Jersey cow number 743383, five years old in E. S. Perry's herd is second in production of butterfat of the individual cows with 634.1 lbs. fat in 10,869 lbs. milk. There are 18 cows in the Morgart herd in the 400 lbs. group for individual cows, and eight cows in Allen R. Eshelman's herd and seven cows in Stanley Koonitz's herd of the 75 cows in the 400 lbs. butterfat group.

The results for the association for the four years is as follows:

Year	Aver. No. Cows	Lbs. Milk	Lbs. Butterfat
1925	301.94	5670	272.2
1926	283.26	6404	308.3
1927	270.80	6904	314.2
1928	308.57	7127	351.08

The result from the whole year members is as follows:

Total average number of cows in the Association	302.57
Average per cow—Pounds of milk	7268.
Pounds of butterfat	351.08
Percentage of butterfat	4.8
Value of product	\$288.34
Cost of roughage including pasture	33.85
Cost of grain	61.38
Total cost of feed	95.24
Value of product above feed cost	193.10
Returns for \$1.00 expended for feed	3.08
Feed cost per 100 lbs. milk	1.31
Feed cost per 100 lbs. butterfat	2.27

#### Individual Herd Records

Owners name and address	Ave. No. Cows	Pounds Milk	Pounds Fat
Allen R. Eshelman, Everett	14.25	7646	492.2
E. S. Perry, New Enterprise	9.50	7646	428.9
Stanley Koonitz, Bedford, No. 4	14.58	7438	416.9
George Greenawalt, Hopewell	7.42	7524	410.5
George Morgart, Rainsburg	27.42	7990	410.2
Harry Clark, Brezewood	10.00	6914	401.1
McKinley Woy, Everett	8.17	7749	397.5
John E. Morris, Everett, No. 8	6.67	6955	384.0
Ernest Replogle, Loysburg	12.17	8506	383.3
Fred W. Cox, Everett	18.05	7499	382.6
Samuel L. Cessna, Bedford, No. 4	13.67	9859	378.1
John L. Baughman, Everett	4.08	6179	372.0
C. E. Koonitz, Lutzville	15.42	6482	365.9
Grover Ritchey, Everett	5.73	6660	350.1
Dennis Koonitz, Lutzville	10.33	7998	348.8
Carl Garland, Buffalo Mills	14.17	8981	346.7
Lloyd H. Diehl, Bedford	20.92	7104	343.4
J. W. Stair, Hyndman	10.42	8508	317.5
S. U. Troutman, Bedford	8.00	6153	314.5
H. B. Hull, New Enterprise	12.08	7751	305.4
Francis Baker, Everett	18.17	5944	304.6

\*Grover Ritchey completed one year's work in eleven months.

#### Individual Cow Records

Following is a grouping of all cows producing over 300 pounds of butterfat:	
Group I—Between 700-800 pounds butterfat	1 Cow
Group II—Between 600-700 pounds butterfat	2 Cows
Group III—Between 500-600 pounds butterfat	15 Cows
Group IV—Between 400-500 pounds butterfat	57 Cows
Group V—Between 300-400 pounds butterfat	118 Cows

Total.....190 Cows

No. 1

OF A SERIES ON AMCO-FED HERDS

## THE RECORD MADE BY THE HIGH HERD

in the Washington County (Pa.)

Cow Test Association

WASHINGTON COUNTY COW TESTING ASSOCIATION  
From Sept. 1, 1927 to Sept. 1, 1928

OWNER—Lloyd D. Linn

ADDRESS—Washington, Pa., R. D. #9

The result of your herd is as follows:

Average number of cows in the herd	12.67
Total Months	152

	Average per cow	Totals for herd
Pounds of Milk	10,857	137,558
Pounds of Butter Fat	392.3	4970.1
Percentage of Butter Fat	3.6	
Value of Product	\$373.54	\$4732.74
Cost of Pasture	\$ 10.50	\$ 133.00
Cost of Roughage	\$ 34.19	\$ 433.20
Cost of Grain*	\$ 80.65	\$1021.89
Total Cost of Feed	\$125.34	\$1588.09
Value of Produce above Feed Cost	\$248.20	\$3144.65

Returns for \$1 expended for Feed	\$2.98
Feed Cost per 100 lbs. Milk	\$1.15
Feed Cost per pound Butter Fat	\$ .32

\*The grain ration was  
AMCO 24% DAIRY

With the above record, Mr. Linn's herd took top place in the Washington County Cow Test Association.

"FROM close observation and records in the Dairy Herd Improvement Association," says Mr. Linn, "I find that AMCO 24% DAIRY produces a maximum amount of milk at a very economical cost, leaving the cows in good flesh and in the best of condition. I have had practically no udder trouble and the feed is very palatable."

AMCO 24% DAIRY is recommended for use with timothy or poor mixed hay; AMCO 20% DAIRY for use with alfalfa, clover, or good mixed hay; AMCO 32% DAIRY to mix with home-grown grains. Your Amco Agent can supply you.



AMERICAN MILLING CO. EXECUTIVE OFFICES, PEORIA, ILL.

Plants at: Peoria, Ill.; Omaha, Neb.; Owensboro, Ky.  
Alfalfa Plants at: Powell, Garland, and Worland, Wyo.

DIVISION OFFICE  
MUNCY, PA.





### Eating Milk

Fluid milk forms the basis of the diet for tiny tots and it is very easy to see that they get their quart of milk a day. As the children grow older and eat a larger variety of foods there is frequently a tendency to omit some of the milk. This is a great mistake as a growing child still needs his daily quart of milk. However, milk is milk whether one drinks it from a cup or eats it with a spoon as cup custard or milk toast. This makes an easy matter to plan dishes using milk, and so arrange for adult as well as child to get the necessary amount of milk in his diet. The quart can be divided, part drunk and the rest served in some cooked dish.

If the children need a change from "plain" milk or want a warm drink on cold days heat the milk with a little malted milk or add enough chocolate syrup to give color and flavor. Chocolate syrup may be made by the pint or quart, and kept in a cool place ready for use from time to time as desired—Egg-nog is simple to prepare, requiring only milk, egg, sugar and vanilla or nutmeg. The addition of a spoonful of whipped cream to either of these modified forms may glorify it into a very special treat for birthday or holiday.

When it comes to cooked dishes there are many attractive ways to serve milk. Nutrition authorities advise two vegetables a day in addition to potatoes.

Creamed soup is an excellent means of adding another vegetable and also affords a way for saving the vegetable minerals. Cream of vegetable soup is different in flavor and very good.

Cream of celery soup uses the outside stalks of celery, leaving the hearts to be served as a relish.

Cream of potato soup, while not adding an additional vegetable, is an excellent way to serve potatoes and at the same time use a fair share of milk.

Left-over chicken may be served as creamed chicken on toast, and cold beef made into meat balls creamed. The flavor of gravies made from roasted or broiled meats is improved by adding milk instead of water.

Milk may also be concealed with bread crumbs and cheese as a cheese fondue, or with a can of corn in a corn pudding. It may appear, with a cream sauce and vegetables, or oysters, or fish or meat.

In another guise it is scalloped potatoes au gratin, or ham and potatoes, or corn and celery.

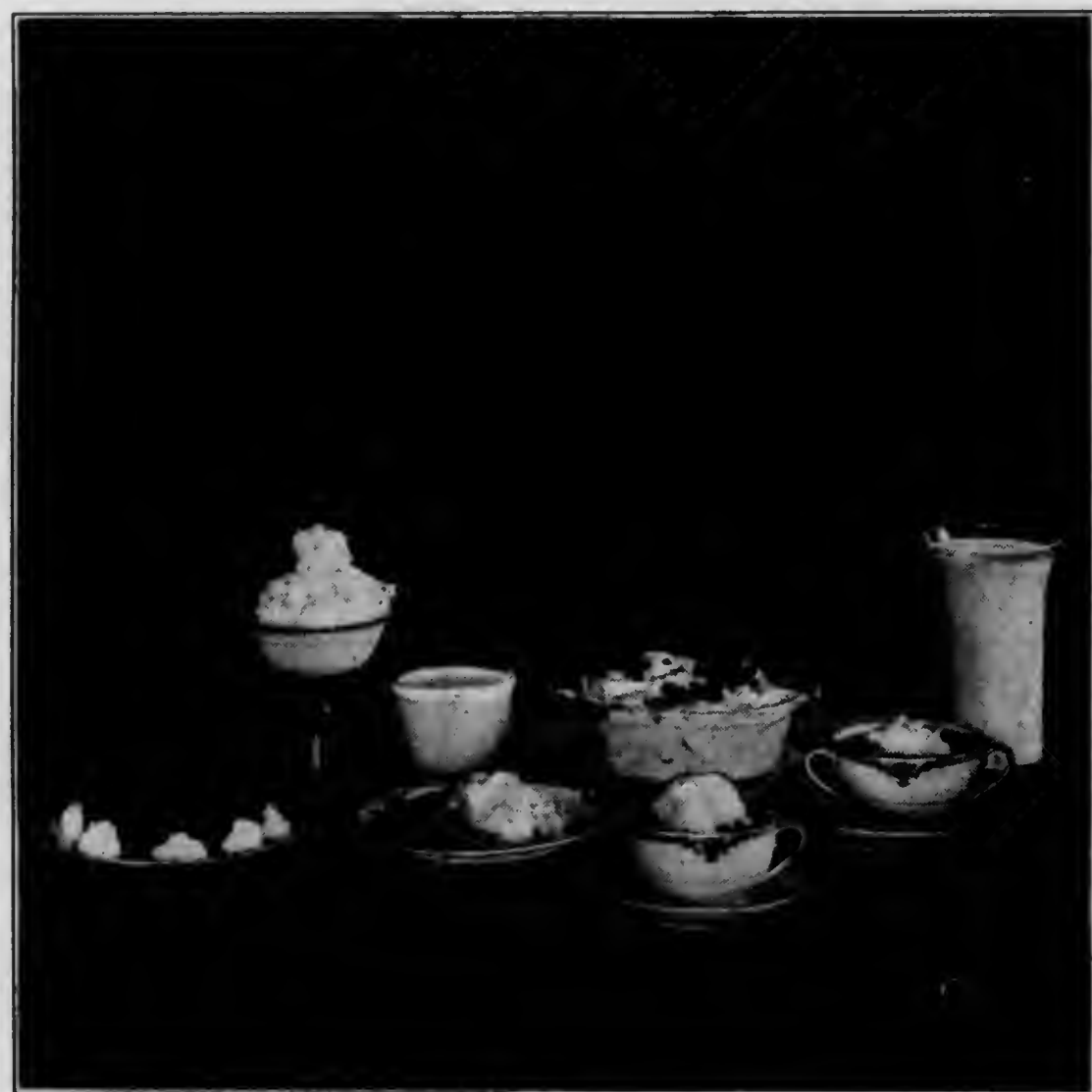
When desserts are to be planned there is opportunity to please the taste of every member of the family. Cup custards are easily made, combined with gelatin they become Floating Island, Spanish Cream or Bavarian Cream; plain Blanc Mange or Chocolate Blanc Mange for a change. Chocolate cornstarch, or plain cornstarch with a sauce of canned strawberries. Chocolate bread pudding served with white of eggs on top, browned to the right shade is a dessert to remember.

Recipes for most of these suggestions as well as others that just as satisfactorily utilize milk are to be found in "Health Recipes", the Dairy Council cook book.

### Be Careful With Cotton

Cotton fabrics usually launder well and require less special handling than most others but even with cotton care is needed to make this durable, hardy fabric stand up well.

Be particularly careful not to cut or break the strands of cotton fabrics. Garments fastened with pins especially with safety pins or heavy brooches soon develop breaks in the yarns which become larger during laundering and wear. Tears which may ruin the garment are often likely to result from these pin holes. Table cloths can be ruined by someone who carelessly cuts a loaf of bread on them. Even a comparatively dull knife may break the material sooner or later. Many towels are damaged by men who insist on wiping razor blades on them. Before deciding that a cotton fabric is defective it is well to be sure that carelessness in use was not the cause of the trouble.



Many Tasty Ways of Eating Milk

### Gay Bath Room in Vogue

The long suffering bath room has at last rebelled just as its neighbor, the kitchen, did years ago. No longer satisfied at its conventional pale appearance, the modern bath room asks this spring to be brightened with the rest of the house. Colorful kitchens became popular years ago. The modern bath room is demanding a gay dress also.

Many stores are selling bright curtains of waterproof, figured cretonne or other colored material which, against a white wall, make a pleasant room, especially if the curtains and rug chosen are of harmonizing colors.

A can of paint and a paint brush can also do much to make the room attractive. The wicker hamper, for example, may be painted yellow, green, or blue, and the bath stools, chairs, mirror frames, and bath room shelves may follow its lead.

### A Few Embarrassing Questions

When a merchant sells you goods which are "short weight," is he cheating you any more than you are cheating yourself when you allow your body to become "short weight?"

Why is the chap who weighs more than he should too much of a good thing?

Why should the thin ones wake up to the advantages of more sleep?

And why should the stout ones wake up and get up?

Should everybody, regardless of weight drink milk—and why should they?

If health is wealth, why is it that leafy vegetables are as valuable as "greenbacks?"

Why is it that if you don't eat plenty of fresh fruit every day you'll find yourself up a tree?

—Happy Goldsmith.

### "A New Story for Stale Bread"

The bread boxes of America contain the ingredients of many dishes of excellence. Stale bread holds the possibilities of attractive trimmings for every day dishes, if you are but aware of it.

#### Cinnamon Toast

Stale bread makes a cinnamon toast, that is delicious. It goes nicely with fruit salads and adds to the light lunch of a cup of cocoa and some fruit.

#### Recipe

Cut stale raisin bread or plain bread in one fourth inch slices. Toast—spread generously with butter. Mix one part cinnamon with three parts sugar. Sprinkle this mixture on the hot buttered toast. Then cut each slice into three strips. These may be cut in half if real small pieces are desired.

#### Chocolate Bread Pudding

Why not disguise the usual bread pudding? We know it can be made popular. Occasionally try the chocolate one. Everyone will like it.

#### Recipe

2 c. stale (but not dry) bread  
1 quart milk  
1/2 c. sugar  
1 tsp. salt  
1 tsp. vanilla  
2 squares chocolate

Soak the bread in the milk until enough to be mashed fine. Melt chocolate over hot water and add to the soaked bread and milk. Then heat until nearly boiling. Beat the eggs until light—then add sugar and salt and vanilla. When well mixed stir this into the bread and milk. Pour into a baking dish. Set in a pan of water and bake three fourths of an hour in a slow oven.

#### Cheese Fondue

Cheese fondue makes one of the nicest meat substitutes one would desire. Sometime when the food budget is a little low it comes to the rescue as a main dinner dish.

#### Recipe

1 c. scalded milk  
1 c. soft breadcrumbs  
1 lb. mild cheese cut in small pieces  
1 tsp. butter  
3 egg yolks  
1 tsp. salt  
3 egg whites

Mix first five ingredients, add yolks of eggs well beaten. Fold in whites of eggs beaten until stiff. Pour into a buttered baking dish, and bake in a moderate oven until baked through. Serve at once.

#### Orange Coconut Pudding

Many desserts owe part of their success to bread crumbs. So do not fail to save them. They will help you any times. A paper bag may be set aside in one corner of the bread box for this particular purpose.

#### Recipe

2 c. milk  
1 tsp. butter  
1 c. stale bread crumbs  
3 tsp. sugar  
2 egg yolks  
1/2 c. grated coconut  
1 tsp. orange extract or grated rind of orange  
Mix and bake as in bread pudding. When baked cover with the following meringue:  
2 egg whites  
Vanilla  
5 tsp. powdered sugar  
Beat the egg whites until stiff. Add gradually three tablespoonfuls of powdered sugar. Fold in the remainder of the sugar and a few drops of vanilla. Pile it on the pudding and bake eight minutes in a moderate oven. Sprinkle with coconut.

### Kitchen Shears

Tradition would have it that the place for shears is the sewing basket. But shears are versatile tools and the housewife who keeps a pair in the kitchen finds them quite as useful there. She uses them to prepare different fruits for the table, to remove the pulp from the centers of grapefruit, for example, or to cut up bunches of grapes. She finds them handier than a knife for trimming pie crust or for shredding lettuce, parsley, and cress for salads or garnishes. When she makes candied orange peel or in arranging flowers for the table she finds them most convenient.

But kitchen shears, to be permanently useful, must be kept clean and sharp. They may be washed like knives or other kitchen utensils but care must be used to dry well to prevent rust. Many housewives keep the blades sharp by cutting them on the neck of a bottle.

### Dairy Council Conducts School for Drivers of City Milk Wagons

A school for milk salesmen is a recent addition to the activities of the Dairy Council in its efforts toward increasing the consumption of milk.

The driver of a milk wagon occupies the strategic position of being the only person in the business of milk production and distribution who comes into direct contact with the consumer. Yet, it has been evidenced that this same driver often has little or no knowledge of the unique food value in a bottle of milk, or of the continuous effort which has been made, from the farms to the city milk plant, to insure the purity of the product which he sells.

It is to correct this situation by arousing an interest in the job of selling more milk and better milk that the Dairy Council has developed and is now conducting schools for milk salesmen among its contributors.

The course deals with three important phases: the handling of the product, its value in the diet, and the best methods of creating sales demand. Two meetings on "The Production of Milk" and "Preparing Milk for the Consumer" are conducted by C. I. Cohee, Director of the Quality Control Department. The subjects of "Food Value of Milk" and "Milk in the Diet" are taught by Frances Fern Hoag of the Nutrition Department, while other meetings are devoted to such subjects as "The Driver and His Job", and "The Principles of Selling Milk" under the leadership of A. J. Churchill, an expert in salesmanship. The entire course consists of nine lessons.

The history of the dairy cow is briefly traced for the city born and bred employees by Mr. Cohee from the state of a wild cow producing only about half its weight in milk per year, down to a cow frequently producing ten times its weight in milk annually. How cows are properly stabled and fed, and the care which is taken of the milk in each step on the farm and in transit, as well as the milk plant processes of testing and pasteurization are explained in detail.

"The man on the wagon" is constantly confronted by many questions which would be poor business for him to be unable to answer. Does pasteurization kill the vitamins in milk? Is milk really fattening? If the children are tired of drinking milk can anything be done about it except to cut down the order? These are samples of queries which confront drivers, and which are presented to Miss Hoag for explanation during the meetings.

In similarly informal groups, the good and bad points in selling are brought out by Mr. Churchill. How to approach a lapsed customer for a renewal of her patronage and the information which would be desirable to use in interviewing a new customer indicate the subjects included in the final phase of the schools for milk wagon drivers. More effective salesmen on the milk wagons mean more milk sales and better satisfied customers.

### Rural Programs Suggested by Dairy Council

During the past few years many successful programs featuring subjects of health such as foods, or various phases of the dairy industry, have been given by Granges, farmers' clubs, country



# How about the Calves?

ONE of the big things to look to while you're getting production is reproduction. In those calves is your future herd.

The feed that looks after the health of the herd as well as production pays. And that's the reason so many are feeding Purina Cow Chow for their supplement.

They've seen Purina take their cows through 6 months high pro-

duction—through calving — through 12 months of increased production and healthy reproduction. They know.

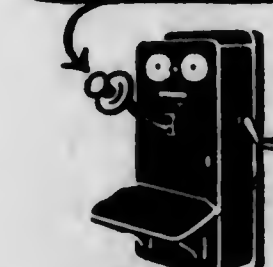
Prove it to yourself for a year. It isn't fair to judge any feed in less than a year. Order from the checkerboard feed dealer.

And by the way—raise those calves on Calf Chow.

PURINA MILLS  
854 Gratiot Street, St. Louis, Mo.  
Sold in checkerboard stores in United States and Canada

Write us for a Purina Cow Booklet—free

TAKE MY ORDER FOR ENOUGH COW CHOW TO HOLD UP MY PRODUCTION ALL YEAR



PURINA CHOWS  
cows - calves  
hogs - steers  
sheep - horses  
poultry

high schools and similar groups in the Philadelphia Milk Shed.

A number of these have featured material which is obtainable from or through the Dairy Council.

Feeling that there was a call for material of this nature, the Philadelphia Inter-State Dairy Council has prepared a small booklet giving sample programs for different type meetings and descriptive material available for all of them. In every instance, the material suggested can be secured from the Dairy Council.

The following is one of the sample programs for adults:

Presentation of Health Program  
Health Songs for Old Times...All singing Reading....."The Garden Party"  
Health Talk—


Home Demonstration Agent  
Play....."Burglar in the House"

These programs are of varying lengths and have been prepared with a special view to fitting into the needs of rural groups who desire an educational and entertaining program without elaborate preparation.

### Running Water

With the weather growing colder the housewife who has running water in her kitchen can be thankful she does not have to go to the pump every time a pail of water is needed. Your county agent has information on how to install plumbing and there is also a community septic tank form in your county for the use of farmers building their own sewage disposal plant. From him you also can get the State College circular on septic tanks.





**Farquhar Steam Boilers**

of All Styles and Sizes for all Purposes Where Steam is Used for

**HEATING or POWER**

Farquhar Line of Boilers includes a type or size for every purpose—Industrial, Laundries, Creameries, Dairy and Milk Plants, Mushroom Houses and all-around General Heating. These Boilers will furnish abundant steam and Hot Water. Burn Wood, Coal or Oil. Quick and Easy Steamers.

All Farquhar Boilers are built in strict accordance with the A. S. M. E. Specifications. Thoroughly tested and can be shipped on quick order. Write for Bulletins stating type and size needed.

We also build Sawmills, Threshers, Hay Balers, Cider Presses, "Non-Wrap" Manure Spreaders, and Farm Implements. Catalogs on request.

**A. B. Farquhar Co., Limited**  
Box 461  
YORK, PA.



## --FERTILITY--

BY  
**McCormick-Deering**

The source of the farmers prosperity is the fertility of his land. No wise farmer will rob the soil without restoring its nourishment with fertilizer. It has been proved that the best way of restoring soil fertility is by the spreading of barnyard manure. And it is being proved every day that the best way to spread manure is with a New McCormick-Deering Spreader.

**The International Harvester Co. of America**  
PHILADELPHIA HARRISBURG BALTIMORE



### Rural Electrification Exhibit and Program at the State Farm Products Show

With over 105,000 rural customers on electric lines of which over 25,000 are farmers and with many more rural people desiring service, the problems pertaining to Rural Electrification are now of major interest among the country people of Pennsylvania.

In order to make it easy for the thousands of Farm Show visitors interested in this question to get the answer to their particular problem, the Pennsylvania Joint Committee on Rural Electrification in cooperation with the Farm Products Show Commission, is arranging for meetings and demonstrations as follows:

#### Second Floor Emerson-Brantingham Building

Rural Electrification Exhibit:—A submerged can type of milk cooking unit of the latest design, will be installed with men in charge to explain the construction and operation. An electric milking machine, electric incubators and brooders and electric driven farm work shop tools, will be shown. An adequate wiring system for the farm buildings will be featured. The more important household appliances such as the electric refrigerator, range, washer, mangle iron, suction cleaner, etc., will be in operation.

Rural service men representing the larger electric companies will be present to answer questions as to how to get service, how to wire the buildings for best results and what different equipment will do. Home Economics demonstrators will be present to explain the operation and work of the household appliances.

#### The Utility Motor at Work—First Floor of Emerson-Brantingham Building

The Pennsylvania State College, under the direction of Prof. R. U. Glasingsame, is carrying on some research work with the utility motor. Arrangements have been made to show the progress being made in the use of the utility motor, in feed grinding, wood sawing and silo filling.

#### Electrifying the Home—Fahnestock Hall, Y. M. C. A. Building

A program will be offered at five different times during which all the operations and details of cooking a farm dinner on an electric range will be demonstrated. While the dinner is cooking, the operation of other household electric appliances will be explained. The sessions will be as follows:

Wednesday, Jan. 23—9:30 to 11:30 A.M.  
Wednesday, Jan. 23—7:30 to 9:30 P.M.  
Thursday, Jan. 24—9:30 to 11:30 A.M.  
Thursday, Jan. 24—1:30 to 3:30 P.M.  
Thursday, Jan. 24—7:30 to 9:30 P.M.

This will be a fine opportunity for the farm women to get the latest details on electrifying the home; there will be opportunity for questions and discussions.

#### Records Tell Story

A good farm record book accurately kept will help a farmer to know his business. A farm without records is like a clock without hands. It may be running right but there is no way of knowing it.

More than 4,000 boys and girls in the United States attended 4-H club camps last summer.

Read carefully the ads. in the Review, you will find them both interesting and profitable.

### "A" Milk Standards Agreed Upon

(Continued from page 1)

as to the advantages of the "A" milk market and also its limitations.

Some years ago a committee met many times with the large distributors in an effort to secure a clearer definition of "A" milk, and more favorable arrangements for its production and sale. This attempt was finally given up as it was seen to be premature.

Some months ago, the matter was taken up again and after careful consideration by the Executive Committee, detailed specifications as to definitions and bonuses were prepared, approved by the Board of Directors and suggested to the trade. Two general conferences of "A" milk buyers were then held. The first adjourned without definite action, but, at the second, approval was secured with respect to the Association's "A" milk specifications and practically all the Philadelphia buyers of "A" milk agreed to be governed by its provisions until further notice. February 1, 1929, was set as the date when the agreement should be made effective. Some out-of-town buyers of "A" milk asked for a little time for further consideration as their local problems are slightly different, but it is thought that in the main the new plan will be very generally adopted for February payments.

#### Analysis of Plan

It is believed the new plan is fair to producers and distributors and will produce a full supply of "A" milk of a character that will satisfy the consumer. Among the outstanding factors in the agreement are:—1st—The method of taking samples for bacterial analysis is carefully outlined to safeguard accuracy, as is likewise the method of such analysis itself.

2nd—The number of bacteria counts per month and the relative importance of an occasional accidental "high count" has been so arranged as to protect the painstaking producer and to prevent confusion and misunderstanding.

3rd—The relative amounts of winter-term bacteria bonuses have been so regulated as in effect to give added bonuses to those producers who had been regular receivers of low bacteria bonuses during the preceding months—(the period of the year when it is most difficult to produce milk of low bacteria count).

4th—The bonuses for high butterfat content of the milk have been standardized. In the case of some buyers these may be slightly different from those paid heretofore, but it is felt that in the main, they are the most nearly fair to all "A" milk producers.

5th—The requirements regarding minimum production per day, sediment test grades and T.B. test are felt to be in line with present practice.

Readers must be careful in studying the plans to keep clearly in mind the differences between specifications for milk shipped direct to Terminal Markets and for milk delivered at Receiving Stations. These differences are primarily (1) bacteria requirements, (2) bacteria counts on which bonuses are based, (3) minimum average amount that can be delivered daily, (4) minimum butterfat tests of milk acceptable as "A" milk.

Rust is costing American farmers \$150,000,000 yearly. Store your machinery this winter.

### Chester County Farm Products Show

The eighth annual Chester County, (Pa.) Farm Products Show was held in West Chester on December 5th, 6th, 7th and 8th, 1928. The show was held in the State Armory Building and in the Memorial Building and every available space in these buildings was employed for exhibition and meeting purposes.

The nature of the exhibits covered the usual range of dairy products, farm machinery and equipment, vocational school exhibits and general health promotion programs.

The various farm groups held meetings during the period of the show, at which many various production and marketing problems were discussed.

The Dairy Section, in charge of F. A. Keen, held a meeting at which an address was made by George Taylor of Penn State College, on the quality and judging of fluid milk. The Holstein Friesian Assn. of Chester County; the Fruit Growers and the Potato Growers held sessions during the period of the show, while various public schools presented demonstrations during the several days of the show. The Philadelphia Inter-State Dairy Council presented its play, "I'll Tell the World," on Friday evening, while, during the other days of the show it assisted in the presentation of educational motion pictures.

In the awards for cow testing association work the following were made:

Morris T. Phillips, of Pomeroy, President of the Chester County Guernsey Breeders' Association, presented a silver butter plate to Porter Farm, of near Phoenixville, for having the finest herd of Guernseys in the Association. The average cow production was 7480 pounds of milk and 374.5 pounds of butterfat.

Charles J. Garret, President of the Holstein-Friesian Association, presented to Arthur High, of Pottstown, a half dozen butter spreaders, as his herd showed the best record in the cow testing work. The average produced was 10,881 pounds of milk and 361.34 pounds of butterfat.

#### Milk Awards

There were 67 separate entries made for prizes in the fluid milk contest.

The following awards are noted.

#### Grade A and AA

First, George L. Wilkinson, Landenberg, 98.5; second, Robt. T. Mendenhall, Avondale, 98.4; third, Evan Townsend, Coatesville, 98.2; fourth, Mante & Co., West Chester, 98.15; fifth, James Speis, Downingtown, 98.05.

#### Grade B

First, Lawrence Folthman, West Chester; second, M. E. Smedley, West Chester; third, Thomas Bros., Edgemont; fourth, F. A. Keen, West Chester; fifth, Roland Conard, West Chester.

A special prize—a silver trophy was given to Geo. L. Wilkinson, Landenberg, for the best three year average score for the three years of 98.33.

#### Feed Legume Hay

Alfalfa hay or alfalfa leaf meal is an effective substitute for succulent green feed for winter poultry feeding. Alfalfa hay may be fed in 2-inch mesh wire netting feeders. If leaf meal is used in place of hay it may be added to the dry mash mixture so that it mixes up from 5 to 10 percent of the mash.

#### Interesting Facts About

#### Penna. Farm Radios

Twenty per cent of the farmers in Pennsylvania had radios in 1927 as compared to six per cent in 1924, says a bulletin on a Farm Survey, prepared by the Pennsylvania Department of Agriculture.

The use of the radio among farmers varied from 10 minutes to 10 hours daily. It averages about 2.8 hours.

More than half of the farmers having radios, used the market reports in buying and selling, and more than three-fourths make use of weather reports in planning farm work.

More than 90 per cent of the farm radios today have loud speakers compared to 57 per cent in 1924.

Farmers have paid from \$2 to \$525 for radio receiving sets, with the average cost, \$111.36.

After once having a radio, only about one in thirty-three farm families would be satisfied without it.

In giving preference for radio programs, farmers show a particular liking for old-time songs, sacred songs, church services, and political features.

A compilation of programs for the winter of 1928-29 shows that there will be within reach of every farm radio owner in the Commonwealth, local stations broadcasting features arranged especially for farmers. Bulletin 468 of the Pennsylvania Department of Agriculture gives tentative schedules of these farm features as well as the results of the Department's radio survey.

### Cold Storage Holdings of Food Products

#### Show Increase

Increased cold storage holding of most food products on December 1, 1928 as compared with the same date a year ago are reported by the Bureau of Agricultural Economics, United States Department of Agriculture. Decreased stocks are reported from frozen poultry and creamery butter.

Total stocks of meats are reported at 608,092,000 pounds compared with 541,184,000 pounds on December 1 a year ago, these stocks including beef, pork, lamb and mutton. Lard holdings are given at 67,015,000 pounds compared with 46,151,000 pounds last year.

Creamery butter holdings are reported at 71,054,000 pounds against 89,224,000 pounds last year, and stocks of American cheese at 74,359,000 pounds against 53,447,000 pounds. Holdings of case eggs are reported at 3,546,000 cases against 2,956,000 cases a year ago.

Total stocks of frozen poultry are placed at 79,576,000 pounds compared with 85,030,000 pounds a year ago. These stocks include 6,266,000 pounds of turkeys compared with 5,242,000 pounds December 1, 1927. Apple holdings are reported at 2,895,000 barrels against 2,055,000 barrels last year; 16,930,000 boxes compared with 13,423,000 boxes, and 5,044,000 bushel baskets compared with 3,905,000 bushel baskets.

#### Provide Ice House

An ice house is a valuable asset to every farm. Winter is the time to put up a good supply of ice for use in the warmer months.

The food supply in the United States has increased 14 per cent in the last five years, while the population has increased less than nine per cent.



**Be fair to Your Cows, to Yourself**



MOLASSES! in dry form is thoroughly mixed into Quaker (24%) Dairy Ration. Cows relish this good feed

**YOU'LL** never know how good your cows really are until you make a fair test of Quaker (24%) Dairy Ration. Confidently, we say that the results will surprise you. For this highly efficient protein concentrate is a *proved, tested* feed for maximum milk production. An ideal supplement for your own roughage, rich in the all-important minerals, and a fine ration for your own blending. It sustains animals that freshened last fall. It will keep your herd in tip-top, profit-producing condition all through the winter. Be fair to yourself—give the scoop shovel a rest—see your Quaker Dealer.

An ideal carbohydrate feed—Quaker Sugared Schumacher. Combines perfectly with any Quaker high protein concentrate (24%, 20% or 16%). A choice feed for young or dry stock; a splendid fattening ration for steers, lambs, and swine. At all Quaker Dealers.

Made by THE QUAKER OATS COMPANY, Chicago, U. S. A.



**HAVE YOU READ THE ADVERTISEMENTS IN THIS ISSUE OF The Milk Producers Review?**  
When you ask for prices, mention the fact that you saw the ad in this paper.



## Strains 100% Clean or your Money Back

Dr. Clark's Purity Milk Strainer is the only strainer on the market guaranteed to get all the dirt, dust and sediment or your money back.

Because it is the ONE strainer that strains absolutely clean is the reason why it is used and recommended by practically all the large dairies, creameries, condensaries, thousands of farmers.

**WHY TAKE CHANCES**  
when you can use Dr. Clark's Purity Strainer with its sterilized cotton disc and KNOW that your milk will grade 100% clean?

Dr. Clark's Purity Strainers are simple to use and easy to clean—save time—bring you higher prices for your milk. Also best for straining maple syrup, vinegar, cider and home beverages.

Sold by good dealers everywhere. Two sizes, 10 quart and 18 quart. Write for descriptive folder and our 10 Day Trial Test Offer. If your dealer can't supply you, we will.

**DR. CLARK'S  
Purity  
MILK STRAINER**

**10  
Day Trial Test**

Write at once for our 10 Day Trial Test Offer. Find out how you can test the PURITY Strainer and get your money back if it doesn't remove every particle of dirt from your milk. Get all the facts. A postal or letter brings you complete information "10 Day Trial Test Offer" by return mail.

**PURITY STAMPING CO.  
Battle Creek, Mich.  
Dept. F-2**

## GREEN'S HOTEL

8th and Chestnut Streets  
PHILADELPHIA, PA.

**ROOMS:** Without Bath.....\$2.00  
With Private Bath.....\$3.50

**TRY OUR FAMOUS  
DOLLAR DINNER**

11 A. M. to 8 P. M.

**GEO. C. HORNER, Manager**

## LIME-MARL

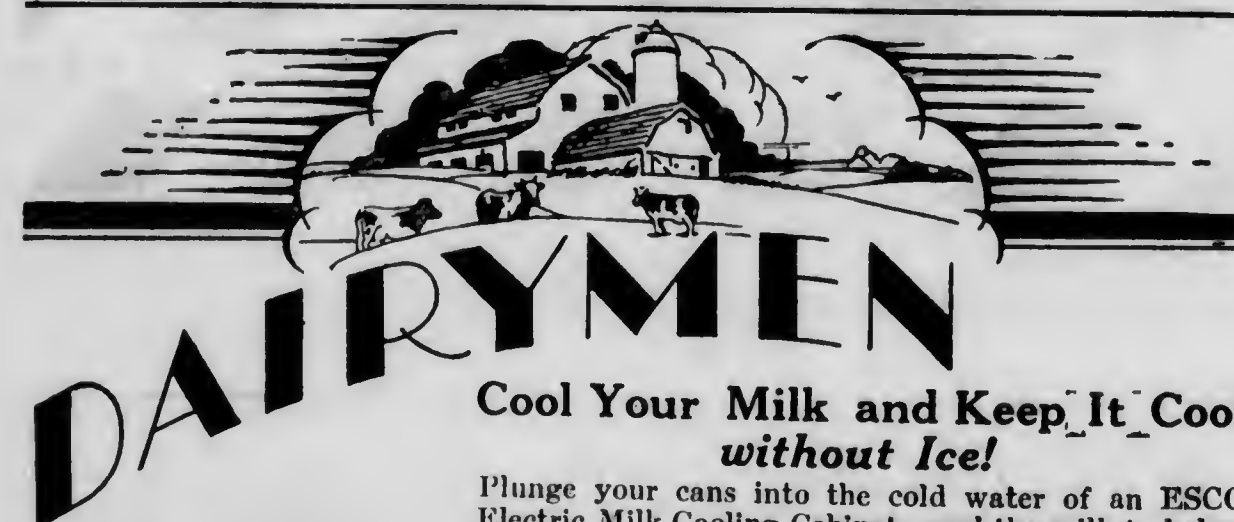
"Nature's Great Soil Builder"

The fine, dry quick-acting, fully available lime. Superior in quality and condition. Brings best results at least cost per acre—low cost delivered your station. Write today for prices and interesting booklet.

**NATURAL LIME-MARL CO., ROANOKE, VA.**  
(2 Plants at Charles Town, W. Va. (B. & O. RR.))

**NICE**  
TRADE MARK REG. U.S.A.

THE NAME TO GO BY—WHEN YOU GO TO BUY  
**PAINT AND VARNISHES**  
Write for color Cards and Booklet "Paint Pointers"  
**EUGENE E. NICE COMPANY, Inc., PHILADELPHIA**



**ESCO**  
ELECTRIC MILK COOLING CABINET  
(Pat. Appl. For)

**Cool Your Milk and Keep It Cool  
without Ice!**

Plunge your cans into the cold water of an ESCO Electric Milk Cooling Cabinet—cool the milk to below 50° and keep it cool. Quick, sanitary, inexpensive. Temperature electrically and automatically controlled. Extreme efficiency. Eliminates handling and storage of tons of ice, and the problem of ice shortage. Enables you to market clean, wholesome milk, low in bacteria-count.

Ask your electric company, dairy supply dealer or electric refrigeration dealer, or write us direct for full details.  
**ESCO CABINET CO., West Chester, Pa.**

## Penna. State Farm Products Show

As we have already announced the exhibit space at the Penna. State Farm Products Show at Harrisburg, Pa., to be held January 22nd to 25th inclusive, will be the largest ever occupied. Over 150,000 square feet of floor space has been taken by exhibitors.

There will be exhibits of corn, fruit, wool, dairy products, eggs and potatoes, honey, tobacco, small grains, sheep, dairy cattle, swine, poultry, beef cattle, home economics products and other farm crops.

The commercial exhibits will be more numerous than ever before and every type of farm and orchard tools will be on display as will also special demonstrations on the use of electricity in the farm home.

The dairy exhibit this year has been planned for display in one building and will include dairy cattle, dairy equipment and supplies. The milk and butter exhibits will be a feature of this show.

**Meetings of Farm Organizations**  
Subjects of interest to every Pennsylvania farmer are included in the programs of the 25 statewide farm organizations which are holding annual meetings during the State Farm Products Show in Harrisburg, January 22-25.

The programs of all the associations have been assembled by the State Farm Products Show Commission and will be available in booklet form early in January.

Among the associations holding meetings are: State Council of Agricultural Association; State Horticultural Association; Potato Growers' Association; Tobacco Growers' Association; Sheep Breeders' and Wool Growers' Association; State Beekeepers' Association; Livestock Breeders' Association; Dairy-men's Association; Federation of Holstein-Friesian Clubs, Ayrshire Breeders' Association; Jersey Cattle Club; Guernsey Breeders' Association; Hereford Breeders' Association; Berkshire Breeders' Association; Chester White Breeders' Association; Duroc-Jersey Breeders' Association; Poland China Breeders' Association; State Poultry and Baby Chick Associations; Threshermen's and Farmers' Protective Association; Society of Farm Women; Pennsylvania Farm Bureau Federation; Association of Dairy and Milk Inspectors; State Entomological Society and Pennsylvania Joint Committee on Rural Electrification.

## Report of the Field and Test Department Inter- State Milk Producers' Association.

The following statistics show the aggregate operations of all the Inter-State Milk Producers' Association field men in connection with testing, weighing and general membership work, for the month of November, 1928.

No. Tests Made ..... 7819  
No. Plants Investigated... 49  
No. Membership Calls ... 206  
No. New Members  
Signed ..... 69  
No. Cows Signed ..... 569  
No. Transfers Made .... 19  
No. Meetings Attended ... 99  
No. Attending Meetings 4297

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3 Year Old, Everblooming Tea Roses. 5 colors. For \$2.  
Bedding Hyacinth. Assorted 20 for \$1.  
Giant Crocus. Assorted 100 for \$1.  
Giant Darwin Tulips. Assorted 100 for \$1.50  
Japanese or German Iris. 25 for \$1.  
2 Year Old CLUMPS. HARDY Mums. 132 for \$1.  
Mixture of Gladiolus. Rare and Ruffled. Top size. 100 for \$1.50 and 25 Maidens Blush FREE. With order of 200, 1000 of these \$12, 100 FREE.  
3 Year Old Privet or Barberries, 40 for \$1.00 or 100 for \$2.  
12 RARE Dahlias \$1. Among them are Jean Stratton, I de ver Warner, Mariposa, Amun Ra, Jersey Jewell, Jersey Beauty, Sunset Glow, Bashful Giant, Mother and others as good.  
All Post Paid.  
**Z. J. STODDARD, MT. HOLLY, N. J.**

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Trucks-Wagons**  
ELECTRIC Steel or Wood  
Wheels are built to fit any  
skate or axle. ELECTRIC  
Low Wheel Handy Farm  
Trucks save high lifts.  
Free catalog describes Wheels,  
Farm Trucks, Wagons and Trail-  
ers for all purposes.  
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## High Grade Dairy Cows in HIGHTSTOWN, N. J.

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All cows tuberculin tested and sold  
subject to a 60 or 90 day retest and fully  
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You can sell your whole milk and still raise "Better Calves" by using dry skim milk and adopting the "minimum milk method." 1 lb. of dry skim milk and water makes 1 gal. of skim milk which costs only one-half as much to feed as whole milk and on which your calves will thrive.  
Write today for Bulletin 301 which tells all about dry skim milk. Gives complete ration and tells how to raise better calves from birth to maturity. We will be glad to send you a 4-cb. sample if you will send the stamps to cover postage and cost of packing. We will also tell you where to buy dry skim milk.  
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**DENATURED ALCOHOL**  
70c Gal.

**Satterthwaite's Seed Store**  
Seeds, Garden Supplies, Hardware  
19 North Warren Street TRENTON, N. J.

## New Jersey State Farm Products Show

Plans for the coming New Jersey State Farm Products Show, to be held in the Armory Building, Trenton, N. J., are fast nearing completion. The show will be held on January 15th, 16th, 17th, and 18th, 1929.

Of especial interest will be the annual meetings of the various state agricultural organizations, which will be held during the period of the show.

The exhibits of farm products, equipment and supplies will be larger than ever before and will be well worth the attention of the farmers in that and adjoining states. The baby chick show promises to be of exceptional interest this year.

### Dairy Meetings

Holstein-Friesian Cooperative Association of New Jersey and the New Jersey Guernsey Breeders' Association, will meet with the State Alfalfa Association on Thursday, January 17th, to discuss their various problems.

The joint meeting of the three organizations will open with a motion picture showing the method of growing soybeans, entitled "Four Men and the Soy." Dr. Frank App will then speak on "Harvesting Alfalfa Hay for Quality," while "Experiences in Growing, Harvesting and Storing Silage Corn" will be presented by Mark H. Keeney, of Cedar Grove; Arthur Danks, of Allamuchy, and Charles Bahrenburg, cow tester of Mercer County.

Following this meeting the dairy groups will hold separate luncheons and business meetings. Dr. L. M. Thompson, vice-president Holstein-Friesian Association of America, will address the State Holstein-Friesian members on the "Present Condition and Future Promise of Holstein Breed." Karl B. Musser, secretary of the American Guernsey Cattle Club, will be the speaker at the Guernsey meeting. A motion picture, "A Tour of New Jersey, Seeing the Guernseys," will also be shown, together with the presentation of the Herdsmen's Cups.

Dr. F. B. Morrison, New York Agricultural College, will speak on "Proteins and Minerals for Dairy Cows" at another joint meeting of the dairymen Thursday afternoon. The annual dairymen's banquet will be held in the evening, with addresses by Dr. Morrison, Dr. John M. Thomas, president of Rutgers University; Dr. Jacob G. Lipman, director, New Jersey Agricultural Experiment Station; W. B. Duryee, secretary of the New Jersey Department of Agriculture, and R. W. Balderston, Interstate Milk Producers' Association, Philadelphia.

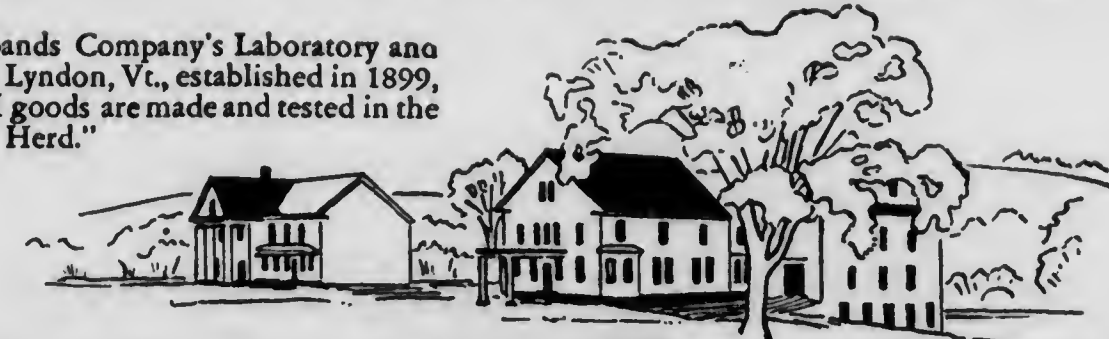
### Clean Up Corn Borer

Before heavy snows come, farmers and gardeners living in the corn borer infested area of the State will find it valuable to clean up all trash and remnants in the corn fields and sweet corn patches. If dry enough, these can be burned. Where the amount is small, burying will dispose of it effectively.

### Lime and Fertilizer SPREADER

That will do the best of work, made to  
attach to any farm cart or wagon  
\$15.00. Send for circular  
**J. S. GREENLEAF ANSON, MAINE**

"Our Husbands Company's Laboratory and  
buildings at Lyndon, Vt., established in 1899,  
where O-H goods, are made and tested in the  
O-H Dairy Herd."



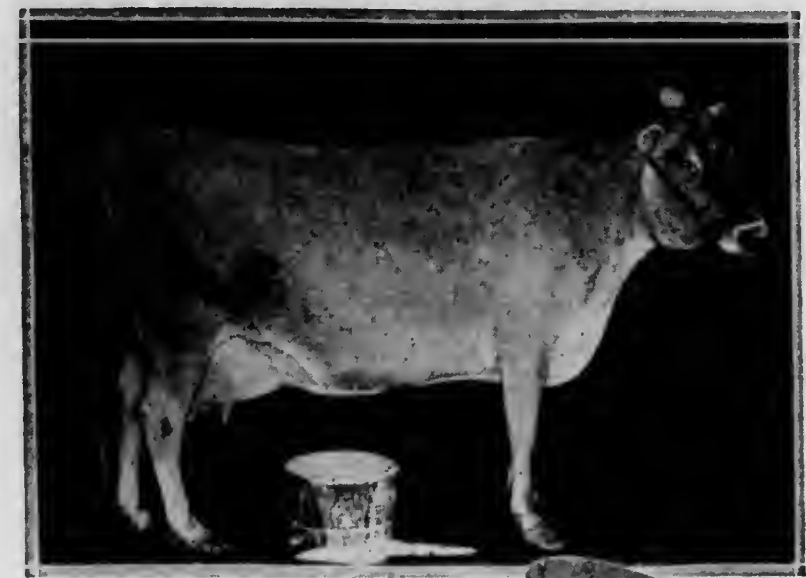
## Increase your milk production this way~

In the formula for O-H COW TONE is found a combination of mineral and vegetable powders that is JUST RIGHT FOR COWS. It supplies certain elements that cows need if they are to do well during the winter months. Try the Cow Tone this winter—a tablespoonful twice a day mixed with the grain. The gain in milk will prove that profits come only through the correct physical conditions of your cows, and that the O-H way is the right way.

**O-H COW TONE for Milk Production  
COWS' RELIEF for Udder and  
Teat Troubles  
CALVES' CORDIAL for Scours**

O-H goods have been on the market with dealers and jobbers for years. If more convenient for you we will send them prepaid, if requested, on receipt of price. Cow Tone 50c - \$1.00, or 25 lb. box \$4.50, 50 lb. box \$8.25. Cows' Relief 50c - \$1.00. Calves' Cordial 50c.

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A group of seven grade Jerseys  
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Herd for demonstration de-  
veloped two 45 lb. cows. The  
average test for the seven  
was 4.8 last winter.

**OUR BOND** is on every  
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Your money back if you  
are not satisfied.



Send  
for the  
O-H Cow  
Book

## Report of the Quality Control Department Philadelphia Inter- State Dairy Council

The following is a report of the work done by the Quality Control Department of the Dairy Council, for the month of November, 1928.

No. Inspections Made ..... 2372  
Sediment Tests ..... 3244  
No. Permanent Permits  
Issued ..... 45  
No. Temporary Permits  
Issued ..... 31  
No. Meetings Held ..... 26  
Attendance ..... 2608  
Reels Movies Shown ..... 8  
Bacteria Tests Made  
(Plants) ..... 7  
No. Miles Traveled ..... 16543  
During the month 24 dairies  
were discontinued from selling for  
failure to comply with the regu-  
lations—10 dairies were reinstated  
before the month was up.  
To date 120,971 farm inspections  
have been made.



## 100 Real Dairy Cows 100

For sale at all times. Tuberculin tested Holsteins,  
Guernseys and Jerseys. Real milk producers.  
Cardinal lots a specialty. Priced to sell.

See or Write

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Buckingham, Penna.

## Alfalfa Hay For Sale

Weights and grades guaranteed.  
Prompt shipment. Write for delivered  
prices.

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192 N. Clark St., Chicago, Ill.

## National Dairy Association Holds Annual Meeting

The annual meeting of the National Dairy Association was held in Chicago, Illinois on December 7th. Reports made by the officers indicated general satisfaction with the year closed. The Exposition at Memphis was described as one of the best ever held. The treasurer's report indicated a loss of about \$2,300 for the year, but the financial condition was about as had been expected.

Eleven directors were elected as follows: Fred K. Babson, Riverside, Ill.; A. E. Bower, Cleveland, Ohio; Sam F. Crabbe, Fargo, N. Dak.; C. E. Gray, San Francisco, Calif.; Charles L. Hill, Rosendale, Wis.; John Le Feber, Milwaukee, Wis.; E. W. Meese, Chicago, Ill.; E. G. Miner, Rochester, N. Y.; Robert Seaville, New York City; F. W. A. Vesper, St. Louis, Mo.; and J. A. Walker, Chicago, Ill.

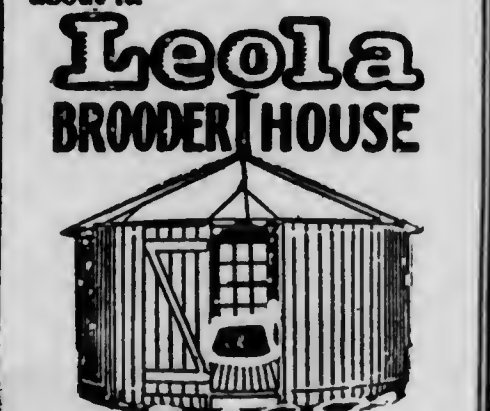
President Hill announced that plans for 1929 were developed with prospects of an enlarged Exposition at St. Louis, and that the dates of October 12th to 19th had been tentatively selected.

At the Board of Directors meeting all the officers of the Association were re-elected as follows: Charles L. Hill, Pres-

**That Leola  
BROODER HOUSE  
Raised 98%  
of My Chicks!**

Not just one such instance—but literally hundreds of them. Poultry men in all parts of the country—hundreds of them—have written us of similar experiences with their Leola Brooder Houses. It's not unusual with a Leola—but without well, how about yourself? What is your percentage? How many of your chicks do you lose?

The Leola Brooder House can help you just as it has helped others. Let us tell you more about it.



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ident and treasurer; Robert Schoville, Vice-President; James A. Walker, Vice-President; L. T. Hiller, Assistant Treasurer; and S. H. Anderson, Executive Secretary.





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1. The only rotary type of milking machine pump, especially designed for milker use—efficient, runs without vibration.
2. The only milker in which lubrication of the entire outfit can be accomplished from one point.
3. The only milker in which the pulsations of all units are controlled from the pulsopump—insuring uniformity of pulsations and absolute regularity of milking.
4. The only milker with a sanitary trap, which eliminates the necessity of a vacuum tank and which collects moisture or any foreign matter and can easily be removed for cleaning.
5. The only milker with a non-adjustable vacuum controller, which prevents too much vacuum from being applied to the cow's udder.
6. The only milker with a non-adjustable pulsator that has only one moving part and operates without the use of valves, springs, weights, diaphragms, adjusting screws, and never requires oiling.
7. The only milker with a non-adjustable claw pulsator located within six inches of the udder, insuring instantaneous transmission of pulsations to teat-cups.
8. The only milker which combines alternating action with absolute uniformity of pulsations, which aids in securing the fastest and cleanest milking.
9. The only milker using simple, straight liners, with self-forming mouth pieces, which aid in obtaining the most efficient milking and are least expensive to replace.
10. The only milker with a double check valve in the pail top, which positively prevents moisture from running from the pipe line into the milk.
11. The only milker in which the air from the pulsators is exhausted over the check valve into the vacuum line, preventing it from coming in contact with the milk.
12. The only milker backed by a world-wide organization, the acknowledged leader in its field, with a record of 50 years of continuous service to the dairy industry.

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# Milk Producers' Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

Vol. IX

West Chester, Pa., and Philadelphia, Pa., February, 1929

No. 10

## Penna. Farm Products Show Exceeds All Former Records

Year after year the Pennsylvania State Farm Products Show forges ahead and the Thirtieth Annual Show, which was held in Harrisburg, Pa., January 22nd to 25th inclusive, was no exception to this rule. The entire program, notwithstanding the inadequate housing space available was a marked success. Farm Products Show week serves two

Pennsylvania State College; M. S. McDowell, Extension Department, Penna. State College; N. S. Fetterolf, Pennsylvania Department of Education; H. D. Allebach, President Inter-State Milk Producers' Association; Miles Horst, Secretary, Pennsylvania Potato Growers' Association, and John H. Light, Secretary, Pennsylvania State Grange. Henry

## Penna. Dairymen's Association Holds Fourth Annual Meeting

That the Pennsylvania Dairymen's Association is going steadily forward was evidenced by the attendance and interest in its Fourth Annual Meeting which was held in Harrisburg, Pa., on January 23rd, 1929, during the Farm Products Show week.

The various sessions were held in the auditorium in the Masonic Temple and

more than 3000 pounds above the production of the average cow of the state.

Cow testing association members who won ribbons for their 1928 records totaled 724, this represents a gain of 34 per cent over that of the previous year. Prof. Fitts also referred to the developments in bull and calf club work as well as to the continued activities of



Dairy Buildings at Iowa State College, Ames, Iowa, with a view at the left hand side, of the Commercial Demonstration Dairy Products Manufacturing Annex. A second section is located at the other end of the main building, not shown in the engraving. The main building is used for class rooms, laboratories and an auditorium adequate to seat all the dairy students. In the annex milk is received from farmers for distribution as market milk and for the manufacture of such products as butter, cheese, condensed milk and ice cream. Similar buildings have been erected recently at the State Agricultural Institutions in Minnesota, Maryland, New York, California, Washington, New Jersey, North Carolina, Oklahoma, Illinois and Kansas.

purposes. It provides a common meeting place for the many agricultural organizations of the State, which are becoming more and more largely attended each year and also provides the space for one of the largest agricultural shows in the country.

Six hundred entries for show space and prize contests were made for this show and those attending the show, notwithstanding unfavorable weather conditions, has been estimated as being over 90,000. Visitors came not only from Pennsylvania but from the surrounding states as well. The floor space used for exhibition purposes was approximately 140,000 square feet and more space could have been sold were it available.

The Pennsylvania Farm Products Show was under the direction of the Pennsylvania State Farm Products Show Commission, by act of legislature, and is composed of the following members: Hon. John S. Fisher, Governor of the Commonwealth; Hon. C. G. Jordan, Secretary of Agriculture; R. C. Bressler, Deputy Secretary of Agriculture; R. L. Watts, Dean, Agriculture Department,

E. Klugh, Pennsylvania Department of Agriculture, served as manager in charge of exhibits, as he has done for a number of years.

The various buildings which were used for show purposes and which were located in near by proximity to the center of the city, include the following: (1) The Republic Truck Building, 57 N. Cameron St., which housed the Baby Beef Show; (2) The Inez Building, 38 N. Cameron St., which housed the show and sales ring for baby beefs and swine and also the wool and lamb shows; (3) The Publication (Emerson Brantingham) Building, which, on the first floor housed the farm implement and machinery show and on the second floor, apiary products, eggs, electrical equipment, home economic, maple products and tobacco shows; (4) Shaffer Building, 50-80 South Cameron St., housed, on the first floor the dairy cattle, dairy equipment, dairy supplies, milk and butter shows; on the second floor of this building, corn, potatoes, small grains, vegetables, horticultural and educational displays were exhibited; (5) In the Vance Building,

the average attendance during the various sessions was close to 400 persons.

The opening session was called to order by Prof. E. B. Fitts, president of the association. In his annual address he reviewed the activities of the association during the past year, and its activities in the interest of the industry. He referred to the status of the members in the Honor Roll of Cow Testing Associations, which now number 724, to the association legislative work and to its growth in membership.

He referred briefly to the present status of the industry, "Pennsylvania", he said, "ranks third in the number of pure bred cattle." Animal disease control is making rapid strides in Pennsylvania, both in connection with Bovine Tuberculosis and Contagious Abortion.

"There has been a considerable expansion of cow testing association work during the past year. The number of associations increased from 67 to 75. These associations have more than 2000 members, with approximately 30,000 cows. The average production of cows in the testing association herds was very nearly 8000 pounds of milk. This is

the cooperative marketing organizations in the state, which he said "were pointing and leading the way toward a better condition in dairying."

"Thirteen years on a Dairy Farm," was the subject of an address by Hugh Fergus, Grove City, who in his paper cited his diversified program of farm management during that period. This paper was a most graphic renewal of experiences a development of a successful farming and dairying program.

W. J. Fraser, Professor of Dairy Farming, University of Illinois, Urbana, Ill., made a most interesting address using as his title "Less Work, More Money." Prof. Fraser, stressed the necessity of having, first of all, good cows and further that they be well bred and well fed. "Good cows, properly fed and cared for, mean profit to the milk producer. The economic cost of feeding must be studied. Alfalfa hay, silage and sweet clover pasture make an ideal feeding program. High producers need grain supplements to balance the ration. Production per cow is an important factor, both from a breeding and feeding standpoint and

(Continued on page 6)

(Continued on page 9)



## Master Farmers Awarded Medals HONOR 15 AT BANQUET

The Master Farmer movement has been defined as an organized effort "to dignify agriculture by recognizing and dramatizing its successes; to encourage farmers to take pride in their calling; to inspire farm boys and girls by showing them that out-standing success is possible in agriculture as in other occupations—not only the success that is measured in money, but what is more important, the success that comes from an upright and useful life in family and community."

The Master Farmer movement was started in the East in 1927 by the "Pennsylvania Farmer." Twelve men were chosen for recognition the first year, nine from Pennsylvania, two from New Jersey and one from Delaware and Maryland. These farmers received the Master Farmer Awards at a dinner in their honor during the 1928 Pennsylvania State Farm Products Show.

The awards this year, were made at a banquet held at the Penn Harris Hotel, Harrisburg, Pa., on January 24th, during the week of the Pennsylvania Farm Products Show, at which E. S. Bayard, Editor of the "Pennsylvania Farmer" served as toastmaster.

United States Senator Arthur Capper, made an outstanding address—"While I am from Kansas." Senator Capper said, "I find Pennsylvania, Maryland, New Jersey and Delaware, pretty good states for the farmer to live in and to prosper. The Master Farmer movement is one that I am deeply interested in. It means successful agricultural operation and it means citizenship. It means that Master Farmers have an interest and part in the welfare of the community as well as themselves. It leads to the making of citizenship for our boys and girls."

There is little difference in farming in this section and in Kansas. Farmers work along the same general lines. They use the same methods of agriculture, of economics, and from political and moral standpoints. Agriculture stands for good government. Your markets here in the east present a wonderful opportunity for the farmer who is not confronted with the transportation problems which the western farmer has to market his crops.

"The farmer is not on the road to ruin. He is making steady progress. Agriculture in this country is, on the whole, good, but production and marketing requires adjustment. Congress must study this question. It must realize the position which the farmer is in, on the whole and endeavor to adjust his problems. The farmer is not entitled to free money but should know the most economic ways of producing and marketing his products, and in this the marketing program is the big factor. There is too much spread between the price paid the farmer and that paid by the consumer. Practical and sensible ways must be devised to equalize these conditions."

The toastmaster then announced the score card on which Master Farmers were selected.

### I. Operation of Farm

1. Maintenance of soil fertility.
2. Crop rotation.
3. Seed used.
4. Quality of livestock; quality and variety of fruit trees and truck crops.

5. Feeding and care of livestock; care of fruit trees and truck crops.
6. Efficient use of man and horse labor.
7. Adequate tools, machinery and equipment well housed and repaired.
8. Convenience of farm arrangement.
9. Products of farm, yield and quality.

### II. Business Methods and Ability

1. Relation of income to expenses.
2. Accounting methods.
3. Business reputation.
4. Marketing methods.

### III. General Farm Appearance and Upkeep

1. Repair and upkeep of buildings.
2. Appearance of yards.
3. Condition of fields.
4. Condition of fences and ditches.

### IV. Home Life

1. Convenient house.
2. Labor-saving equipment in home.
3. Character as father and husband.
4. Education and training of children.

### V. Citizenship

1. Neighborliness.
2. Interest in schools and churches.
3. Interest in other community enterprises.
4. Interest in local and national governments.

The Gold Medals were awarded by C. L. White and G. W. Harris, of the "Pennsylvania Farmer."

### Master Farmers of 1928

Ray F. Brown, Huntingdon County, Pa., a farmer specializing in dairying and poultry raising. He has a Dairy Honor Roll herd, with a production record of more than 9000 pounds milk and 320 pounds butterfat. His poultry flock of 300 pure bred, blood tested Leghorn hens, with an average record of 200 eggs each per year. He is a community leader and a member of the Grange.

William J. Clayton Monmouth Co., N. J. He started as a hired hand on the farm and since he began farming for himself, in 1901, has become a potato grower of note. Mr. Clayton is a pioneer in field experimental work with potatoes as to seed sources, fertilizer and disease control.

L. Otis Corkran, Dorchester County, Md. Active as a producer of melons and vegetables. In 1928 he grew 75 acres of cantaloupes, 60 acres of asparagus, 10 acres of cauliflowers, 6 acres of cucumbers and more than 2 acres of peppers. He operates a farm of 380 acres, originally occupied as a tenant and later purchased. Mr. Corkran is vice president and director of a local bank and has served his district as a member of the House of Delegates of Delaware.

E. S. Ferry, Bedford County, Pa. Mr. Ferry started farming as a renter farm in the Morrisons Cove District. After six years he bought the farm. His potato crops have placed him in the 400 bushel club. He is an alfalfa, wheat and corn grower of note. His flocks of sheep are noteworthy. His herds of swine, and Jersey cattle are headed by outstanding registered sires.

Edison M. Hay, Somerset County, Pa. Mr. Hay is a man who has carefully studied his farming program and has always stood ready to adopt new modern methods and equipment. He has a registered herd of milking Shorthorns. He has supported the cow testing association, the tuberculin test, boys' and girls' club work and many projects

(Continued on page 13)

## The Agricultural Outlook for 1929 U. S. DEPT. AGRICULTURAL ECONOMICS

The gradually increasing demand for milk and milk products will probably maintain about the present spread between the prices of feed and the prices of dairy products until there is such a material change in the beef situation that farmers will increase milk production by milking a larger number of beef-type cows. As combined domestic production of all dairy products during recent years has averaged about 99 per cent of domestic consumption and as prospective foreign supplies limit the level to which domestic prices can rise, the situation does not justify more than a gradual expansion of dairy herds, possibly not more than one per cent per year.

Farmers now have an opportunity to dispose of old cows for beef purposes at good prices. This opportunity will probably be open for two or three years.

The number of milk cows on farms is about the same as at this time last year. In nearly all States the number of yearling heifers and heifer calves being kept for milk cows is larger than the number on hand a year ago; in the Northeast the increases are substantial, but, for the country as a whole, the present number is less than one per cent above the number ordinarily required to maintain the present number of milk cows. Changes in number of cows milked during the next two years will depend largely on the relation between price of beef and price of dairy products, for this affects both the age at which milk cows are sold for slaughter and the number of beef-type cows milked. Returns from dairying will continue to vary rather sharply from season to season according to pastures, feed conditions, and urban demand. Profits in individual years will depend on the promptness with which changes in production costs are reflected in changes in production and in changes in the prices of dairy products. With the number of milk cows increasing only slowly, if at all, the gradual increase in the per capita requirements of the increasing population seems likely to result in prices averaging sufficiently above feed costs to permit a gradual further increase in the production of milk per cow.

The number of milk cows on farms in the United States has changed but little during recent years. The number increased from 21,408,000 in 1921 to 22,523,000 in 1925 and then decreased to 21,824,000 last year and to 21,820,000 on January 1st, 1929.

Loss of dairy cows from tuberculosis eradication is decreasing and now amounts to only about one per cent of the total milk cow population. With little change in milk cow numbers for several years anticipated, and little or no shift from beef-type to dairy-type cows expected, changes in milk production will depend largely on the intensity of feeding. During recent years the relationship of prices of dairy products to both beef prices and feed prices has been relatively favorable for dairying, and production per cow has increased, because of more intensive feeding and shift toward dairy type cows. Between 1924 and 1927 production per cow appears to have increased about ten per cent, the increase being shared by all sections of the country, but the production per cow in 1928 was apparently about the same as in 1927.

Pastures in 1928 averaged poorer than usual until mid-summer and then were correspondingly better than usual. Combining the seasonal averages in the various States in proportion to the State's importance in milk production, the condition of dairy pastures averaged 81 in 1928 to 86 in 1927, and 76 in both 1926 and 1925.

Hay supplies are lower than the record supplies of last year, and feed prices are somewhat higher. The most marked changes are in the lower supplies of legume hays and in the higher prices of high protein concentrates. It does not seem likely, however, that feed prices will advance as much as they did last spring.

Consumption of dairy products was maintained throughout 1928 despite the slightly higher prices which prevailed. Demand seems likely to remain high through the first half of 1929 with a possible downturn in demand toward the end of the year or in 1930.

The quantities of foreign dairy produce absorbed by our markets were somewhat lessened in 1928, while our sales of concentrated milk abroad increased. The net importation of dairy products into the United States on the basis of total milk equivalent was about one per cent of domestic production. It cannot be expected that this year will bring less pressure from foreign competition. Practically throughout all the year foreign dairy production was retarded by unfavorable pasture conditions and European markets were strengthened by unusual demand. Together, Great Britain and Germany took some 10 per cent more butter in 1928 than in 1927, with higher average prices prevailing in their markets. The season of flush production in New Zealand, and Australia, begins in August and during the first three months of the current season, New Zealand butter production is officially estimated to have been 15 per cent greater than for the same period for the previous season, and Australian butter production during the first four months is estimated to have been a third heavier. Most of the influence of increased supplies from the Southern Hemisphere during the current season which began in August is still to be felt in our markets.

While the North Eastern States may be helped somewhat by the shift from dairy production to beef production in the western Corn Belt, they face the probability of a steady increase in the shipments of fluid cream into their territory from the mid-west, and they are likely to suffer if they expand production faster than is necessary to supply their growing local demand for fluid milk. In fact, holding herds at present levels for several years, while shifting freshening dates enough to prevent fall deficits, would decrease milk sold as surplus and possibly improve the dairy farmers' returns. Either a general increase in cow numbers in this section, or failure to provide for the fall shortage which would force dealers to draw upon new territory, would continue a surplus production and depress dairy returns to farmers in this section.

During the past five years the eastern section of the Middle West has shown continued moderate expansion in butter and cheese, but quite material decreases in condensed and evaporated milk.

## New Jersey Farm Products Show and Agricultural Conference Held in Trenton

The activities of Agricultural Week in New Jersey centered around the Fourteenth Annual State Agricultural Conference, the Farm Products and Equipment Show and meetings of fourteen State Agricultural organizations. The various meetings as did the Farm Products Show were held in Trenton, New Jersey, January 15th to 18th inclusive.

The Annual Convention of the State Board of Agriculture was held in the State House, on January 16th. Some thirty different farm organizations attended the meeting which was presided over by Clifford E. Snyder.

Prominent agriculturist including Dr. W. R. Motherwood, Minister of Agriculture for Canada; Dr. Charles L. Marlatt, Chief of Plant Quarantine and Control Administrator, Washington, D. C.; William B. Duryee, Secretary of Agriculture for New Jersey and Charles R. Stout president, State Association of County Boards of Freeholders, made addresses. An address of welcome was made by Hon. Morgan F. Larson, Governor of the State of New Jersey.

Important meetings were held during the week by the New Jersey Federation of County Boards of Agriculture; the New Jersey Poultry Association; New Jersey Baby Chick Association; New Jersey State Potato Association; New Jersey Alfalfa Association; Holstein-Friesian Cooperative Association of New Jersey; New Jersey Guernsey Breeders' Association; New Jersey Dairymen; Farmers' Roadside Market Association of New Jersey; New Jersey Beekeepers' Association; New Jersey State Horticultural Society and a Vocational Teachers' Conference. In many instances these associations held annual meetings and banquets, elected officers, and transacted important business.

### Dairyman Meet

The New Jersey Alfalfa Association, the Holstein-Friesian Cooperative Association and the New Jersey Guernsey Breeders' Association held a joint meeting on Thursday, at which many interesting topics were discussed. Addresses were made by Dr. Frank App, Bridgeton, N. J., on "Harvesting Al-

falfa Hay for Quality." Dr. L. M. Thompson, vice president Holstein-Friesian Association of America, who spoke on "Present Conditions and Future Promise of the Holstein Breed and Karl B. Musser, Secretary American Guernsey Cattle Clubs, Petersburg, N. H. Business sessions of these different organizations were held at various periods during the day.

### New Jersey Dairyman's Banquet

A joint banquet of the Dairyman of New Jersey was held on Thursday evening at the Hildebrandts Restaurant. E. J. Perry acting as toastmaster.

Addresses were made by Prof. F. B.

dairymen within the Inter-State territory: M. I. Demorest, Woodlawn Farm, Princeton; Manual Training and Indus. School, Bordentown; Wm. T. White, Hill Top Farm, Princeton and J. E. Russell, Glenburnie Farm, Trenton.

Among those who received Herd Improvement Association Ribbons were the following. 400 pound class: J. H. Ridgway, Salem; A. I. Waddington, Woodstown; Walter Stelle, Dutch Neck; Raymond Groendyke, Dutch Neck; William Hamilton, Pennington; Edward Phillips, Cape May; A. D. Fogg, Shiloh; and J. H. Rogers, Wrightstown.

In the 350 to 399 pounds of butter fat

lowing may be mentioned: G. A. Coombs, Davis Bros., L. S. Harris, A. S. Gaunitt, R. B. Harris, F. C. Petit, J. C. Petit, S. K. Shrimp, and C. H. Barrett, all of Salem; C. H. Kirby, Mullica Hill; H. H. Fisher, Stockton; L. S. Davis, Shiloh; W. W. Shute, Bridgeton; F. C. Renne, Shiloh; Howard Davis, Shiloh; H. W. Kincaid, Maritua; R. P. Duffield, Brown Bros., E. A. Jones and Harry Edwards, Mullica Hill; Sherman Perkins, Mount Holly; J. H. Lippincott, Mount Holly; Herman Crosshaw and Son, Wrightstown; A. R. Jackson, Columbus; Masonic Home, Burlington; Adam Spence, Wrightstown; Louest Lane Farm, Medford; George Royce, Columbus; Henry Winner, Mount Holly; G. Harker, Pemberton; H. Zelle, Roebling; Clifford Borden, Wrightstown; A. Burtis, Mount Holly; J. Kikina, Wrightstown; W. S. Davis, Wrightstown; C. C. Boyer, Columbus.

### Farm Products and Equipment Show

The Farm Products and Equipment Show, which was held in the Armory Building was not only the largest but the most attractively arranged exhibit that has yet been held. The building was elaborately decorated and the character of exhibits was of a high order. The number of exhibits of agricultural equipment and appliances has been rapidly increasing.

The various agricultural products shown included, apples, potatoes, corn, small grains, vegetables and other products. The various dairy breed associations were represented as was also the Philadelphia Inter-State Dairy Council. There was an elaborate exhibit of Baby Chicks.

The New Jersey State Department of Agriculture and other departments of State Government showed exhibits typifying their particular work. These included among others, exhibits of State Building Farm Specifications, State Soils, Marketing Standardizations, Bureau of Markets, Farmers Markets, Beekeeping, Statistical and Inspected Service, Animal Industry, Corn Borer Treatment, etc. Exhibits were also made by the Department of Highways, Public Library Service, State Police Department and the Vocational Schools.



A Partial View of the New Jersey Farm Products Show  
Held in the Armory Building

Morrison, of the New York Agricultural College; Dr. J. M. Thomas, President of Rutgers University; Dr. J. G. Lipman, Director of New Jersey Agricultural Experiment Station; Mr. C. I. Cohee, Director Quality Control Department, Philadelphia Inter-State Dairy Council; Clifford (Happy) Goldsmith of the National Dairy Council and W. B. Duryee, New Jersey State Secretary of Agriculture.

During the banquet the announcement of awards was made to breeders and dairymen who have done meritorious work in advanced registry testing and herd improvement association testing during the past year. These honors, among others, went to the following

class the following may be mentioned: H. M. Flitterat, Woodstown; J. J. Petit; J. S. Abbott, Joseph Bell and R. Shinn, of Salem; Joshua Tindall, Trenton, R.D. 2; Joseph Feler, Lambertville; C. A. Hausser, Yardville; E. J. Morris Penns Neck; Reuban Van Horn, Stockton; C. N. Schellinger, Cape May; Edward Hepner, Shiloh; E. G. Willis, Shiloh; Frank Castner, Stewartville; Joseph S. Evans, Medford; Eyrn Evans, Medford; Thomas E. Bunting, Crosswick; Edward Bunting, Wrightstown; Herbert Deacon, Columbus; J. H. Atkinson, Brown's Mills; A. Horner and Son, Pemberton; Borden Estate, Burlington and John S. Pew, Mount Holly.

In the 300 to 350 pound class the fol-

## Inter-State Directors Hold Meeting in Harrisburg

The regular bi-monthly meeting of the Board of Directors of the Inter-State Milk Producers' Association, was held, as has been the custom for two years, in Harrisburg, Pa., during the period of the Pennsylvania Farm Products Show. The meeting was held on January 22nd, at the Penn Harris Hotel.

Officers and directors attending the meeting included, H. D. Allebach, president; Frederick Shangle, vice president; Robert F. Brinton, treasurer; F. M. Twining, assistant treasurer; R. W. Balderston, secretary; I. R. Zollers, assistant secretary and the following directors: S. K. Andrews, J. H. Benetich, Ira J. Book, E. H. Donovan, E. Nelson James, J. W. Keith H. I. Lauver, S. Blaine Lehman, I. V. Otto, J. A. Poorbaugh, C. F. Preston, Albert Sarig, John Carvel Sutton, C. C. Tallman, R. I. Tussey, Harry B. Stewart,

S. U. Troutman, Frank P. Willits and A. B. Waddington. The minutes of the previous meeting were approved. The report of the treasurer was presented and approved.

Frederick Shangle, who represented the association at a meeting of the Shippers' Advisory Board, held recently in New York City, presented a formal report of that meeting.

F. M. Twining, in charge of Testing and Field Work made a report of the activities of that department during the past two months, while C. I. Cohee, Director, Quality Control Department of the Dairy Council reported as to conditions within the territory during the period.

After a general discussion the Board decided that the next annual meeting of the association be held in Philadelphia on Tuesday and Wednesday, November 19th and 20th 1929, and that it be held

in the Benjamin Franklin Hotel, in that city, J. O. Eastlack, statistician who has been assisting the National Cooperative Milk Producers' Federation Tariff Committee made report of the work of preparation of statements and arguments of that committee, in urging Congress to enact adequate tariff legislation to protect the dairy industry.

In order to more fully acquaint the county agents in the respective states and territories in the Philadelphia Milk Shed with the program of the association it was decided that three meetings be held with the county agents, one in Philadelphia to include the Pennsylvania County Agents, one in Maryland to include Maryland and Delaware representatives and one in New Jersey. Details of these plans are to be arranged by the officers of the association.

Interesting reports by the directors, as to conditions in their respective ter-

ritories showed a generally good condition.

President Allebach briefly outlined market conditions. At this time some of the smaller buyers are receiving more milk than necessary to meet their immediate consumptive demands but the larger buyers have not reported any marked increase in the supply.

The revised 1929 Philadelphia Selling Plan became effective with January first and producers will be paid on the basic and surplus plan.

He referred briefly to the new definitions and regulation for the production and sale of A milk, which became effective on February first. Details of the plan have been printed at length in the "Milk Producers' Review" and we will endeavor to print definite quotations covering the sale of this class of milk monthly in the regular price quotations in its column.



## INTER-STATE MILK PRODUCERS' REVIEW

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The facilities available for the housing of the Pennsylvania Farm Products Show at Harrisburg, have again fully demonstrated the need for an adequate building to house this great show.

This show is a unique one, in that it represents every branch of agriculture in the State, and all important farm organizations are represented on the advisory group of the Farm Products Show Commission. In connection with the show some 30 different state-wide farm organizations make it their annual meeting place for extended sessions. It is the common ground at which the whole agricultural interest of the State meet, fraternize and thrash out their common problem.

This democratic policy has made the Pennsylvania Farm Products Show what it is today, the common ground of every branch of agriculture in the state.

The Pennsylvania Farm Products Show is the largest of its kind in the United States. Over 140,000 square feet of floor space alone was needed for exhibition space this year. Nearly 90,000 persons attended the show. Its present facilities are highly unsatisfactory and not suited for their purpose. Its housing has been a make shift for years—and still it grows.

Governor Fisher is to be commended for his action in budgeting in his appropriation bill, before the present legislation, an appropriation for a State Farm Products Show building. The sum of \$1,356,000 for the erection of the building and its expenditures during the next two years should be approved. The building should be so constructed as to permit of its use for other State and general utility purposes when not required for Farm Products Show purposes.

The farmers of the State have approved this proposition. It represents a definite need for agriculture in Pennsylvania and should have the approval of the Legislature and then every effort should be made to have it completed in time for the 1930 Farm Products Show.

The dairy industry of Pennsylvania owes much of its present prosperity to the research, instruction and extension work conducted by Pennsylvania State College.

At the present time the staff in the Department of Dairying is working

under a severe handicap due to the lack of an adequate building and equipment for the purpose of research, demonstration and instruction in dairying. Due to the growth in importance of the Dairy Industry in Pennsylvania the Dairy Department has entirely outgrown its physical facilities. We are glad to say that the dairymen of the State as represented by the Pennsylvania State Dairymen's Association, has taken a forward step in urging the necessity of including a new Dairy Building for the College in the building program of that institution. If the College authorities find it possible to accede to the request of the dairymen they will be but falling in line with similar improvements at other state institutions within recent years.

Probably we should not be "Tooting Our Own Horn", but nevertheless, have you noticed how officers of the Inter-State Milk Producers' Association were honored by different organizations in Pennsylvania which held their annual meetings in Harrisburg, during the period of the Farm Products Show? H. D. Allebach, our president, was elected president of the Pennsylvania State Council of Agricultural Organizations. He was also elected president of the Federation of Holstein-Friesian Clubs of Pennsylvania; while Robert F. Brinton, treasurer of the association was elected president of the Pennsylvania Dairymen's Association.

In addition to the above Frank P. Willits and Son was awarded a gold medal as Master Farmer by the "Pennsylvania Farmer". Frank P. Willits was the president of the Inter-State Milk Producers' Association for many years and is today a member of the Board of Directors and a member of the Executive Committee of the Board.

### Report of the Field and Test Department Inter-State Milk Producers' Association.

The following statistics show the aggregate operations of all the Inter-State Milk Producers' Association field men in connection with testing, weighing and general membership work, for the month of December, 1928.

No. Tests Made ..... 4823  
No. Plants Investigated... 55  
No. Membership Calls ... 282  
No. New Members  
Signed ..... 104  
No. Cows Signed ..... 624  
No. Transfers Made .... 16  
No. Meetings Attended .. 16  
No. Attending Meetings.. 722

### JANUARY BUTTER PRICES

	Philadelphia	New York	Chicago
2	49 1/2	48 1/2	46 1/2
3	50	49	46 1/2
4	50	49	46 1/2
5	50	49	46 1/2
6	50	49	46 1/2
7	50 1/2	49 1/2	47
8	50 1/2	49 1/2	47
9	50 1/2	49 1/2	47
10	50 1/2	49 1/2	47 1/2
11	50 1/2	49 1/2	47 1/2
12	50 1/2	49 1/2	47 1/2
13	50 1/2	49 1/2	47 1/2
14	50 1/2	49 1/2	47 1/2
15	50 1/2	49 1/2	47 1/2
16	50 1/2	49 1/2	47 1/2
17	50 1/2	49 1/2	47 1/2
18	50 1/2	49 1/2	47 1/2
19	50 1/2	49 1/2	47 1/2
20	50 1/2	49 1/2	47 1/2
21	50 1/2	49 1/2	47 1/2
22	50 1/2	49 1/2	47 1/2
23	50 1/2	49 1/2	47 1/2
24	50 1/2	49 1/2	47 1/2
25	50 1/2	49 1/2	47 1/2
26	50 1/2	49 1/2	47 1/2
27	50 1/2	49 1/2	47 1/2
28	50 1/2	49 1/2	47 1/2
29	50 1/2	49 1/2	47 1/2
30	50 1/2	49 1/2	47 1/2
31	50 1/2	49 1/2	47 1/2

## Market Conditions

H. D. ALLEBACH

Evidently some of the readers of the "Milk Producers' Review" failed to fully understand the new Definitions and Methods of Payment for "A" milk, as printed in the January issue.

If shippers of "A" milk will read the statements, clearly as presented we believe they must realize that the producers have been given a square deal.

While the minimum butter fat standard, under the definitions, was raised in some instances from 3.5 to 3.7 per cent, producers were given two years to make this change. In other words there will be no change in the 3.5 minimum for one year. At the end of the year, or in February, 1930, the minimum will be 3.6 per cent and this is not raised to 3.7 until the end of the second year or February, 1931. This same policy is adopted where the present standard is 4% butter fat but the standard under the present program will be decreased one tenth of one per cent each year until the 3.7% level has been reached.

Another point that has not been fully understood. The new plan does not increase the demand on the part of the buyers, for "A" milk. It applies only to present "A" plants and an additional "A" milk will be needed, unless of course the demand for this class of milk on the part of the consumer increases. Those producers who have been shipping "B" milk to "B" plants do not make any change in their plan of shipment or payment, whatever.

For one year therefore the price to be paid for "A" milk starts at 3.5% butter fat although the actual definition places the standard at 3.7 per cent, which point will automatically be reached.

In the "Latest Market Prices" columns on page 5 you will find an announcement for February payments by buyers of "A" milk, cooperating with the association.

### Supply and Demand

The supply of fluid milk during the early part of January appeared to be much greater than during the previous month, although I do not believe it was as much a matter of excess production as it was one of decreased consumption, due on a measure to the abnormal condition surrounding the holiday season. Toward the close of January consumption again became more normal and the market on the whole, was in better shape.

With the month of January we again return to the basic and surplus provisions of the Philadelphia Selling Plan under which producers will be paid basic prices for their established basic quantities of milk and first and second surplus prices for milk in excess of their basic quantities. First surplus represents the price paid for milk in excess of the basic quantity and equal to it in amount and second surplus represents the price paid for milk in excess of the first surplus amount. First surplus prices are based on the average price of 92 score solid pack butter, New York City, plus 20 per cent while second surplus is based on the average price of 92 score solid pack butter, for the month.

### January Milk Prices

Milk shipped during January will be paid for, by cooperating dealers, under the provisions of the Philadelphia Selling Plan.

Grade B market milk three per cent butter fat content (basic quantity aver-

age) delivered f. o. b. Philadelphia during January, is quoted at \$3.29 per hundred pounds.

The price of grade B market milk, basic quantity average, three per cent butter fat content, delivered at Receiving Stations in the 51-60 mile zone, during January is quoted at \$2.71 per hundred pounds. The usual butter fat differentials applying in other mileage zones in the territory are quoted on page 5 of this issue of the "Milk Producers' Review."

The price of Class I surplus milk for January, three per cent butter fat content, delivered f. o. b. Philadelphia is \$2.44 per hundred pounds or 5.25 cents per quart. The price of Class I milk three per cent butter fat content at all Receiving Stations is \$1.86 per hundred pounds.

The price of Class II surplus, 3 per cent butter fat content, f. o. b. Philadelphia delivery is \$2.06 per hundred pounds or 4.4 cents per quart. The price of this class and grade of milk delivered at all Receiving Stations is \$1.48 per hundred pounds.

### January Butter Market

The market has shown some price fluctuations, but the range from day to day has not been heavy. Early in the month prices were firmer with a gradual upward trend. Before the mid month period had arrived nervousness again set in. Considerable quantities of butter were coming out of storage and trading became unsatisfactory with a resulting downward trend in prices.

Declining storage stocks, an increase in the offerings of fresh butter and a probable decrease in the make, due to colder weather conditions appeared to stiffen the market during the latter half of the month.

A summary of the storage holding of creamery butter, as of January 1st, 1929, available January 12th, had a somewhat more steady effect on the market. The report showed holdings of 43,786,000 pounds, as compared to 46,289,000 pounds one year ago and a five year average of 45,883,000 pounds. With this stronger statistical condition sellers were inclined to firm up on prices.

This in a measure was further strengthened by delayed deliveries particularly from the west and a stronger and firmer tone was in evidence with a gradual upward turn in prices, even in the face of an apparent slight increase in the make.

Foreign butter has had but little influence on the market.

The butter market opened the month at 48 1/2-49 cents for 92 score solid pack New York City delivered, to the low point 46 1/2 in mid month after which there was a gradual upward movement, closing at 50 cents.

The average price of 92 score butter, solid pack, New York City on which the surplus price for January was computed was .4776 cents, as compared to .5084 cents one year ago.

"Some farmers like to milk so well they keep ten poor cows rather than five good ones," says "Ye Farme Gosipe" of Clemson College of South Carolina.

It costs a great deal less to produce 100 pounds of milk from heavy yielding cows than from cows producing smaller amounts.

## LATEST MARKET PRICES

The basic price, quoted below for January, 1929, is to be paid by co-operating dealers on the average basic quantity established by each producer. For all milk bought in excess of the basic amount, the surplus price, quoted below for the month of January, 1929, are to be paid. Surplus milk will be paid for under two classifications. Class I, represented by the amount of milk in excess of the basic average and equal to it in amount, which will be paid for by co-operating dealers on the basis of 92 score butter, solid pack, New York City, plus 20 per cent and Class II surplus represented by milk shipped in excess of the first surplus amount, which will be paid for on a flat average 92 score butter for the month.

The following quotations are based on 3 per cent butterfat content milk and a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down, and are for all railroad points. (Inland stations carry differentials subject to local arrangements.)

**PHILADELPHIA SELLING PLAN**  
INTER-STATE MILK PRODUCERS' ASSOCIATION PRICES  
This price list is issued with the understanding that it is net to the producers and that all buyers using it as a basis of payment to producers, shall in addition thereto make the following contributions and payments:  
(1) To the Philadelphia Inter-State Dairy Council 2c per 100 pounds (46 1/2 quarts) of all milk purchased from any producer at prices listed hereon.  
(2) To the Inter-State Milk Producers' Association 2c per 100 pounds (46 1/2 quarts) of all milk bought from members of said Association.  
(3) To the Philadelphia Inter-State Dairy Council 2c per 100 pounds (46 1/2 quarts) of all milk bought from other producers at prices listed hereon.  
The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed, for improvements and stabilization of markets and for an educational campaign advertising the food value of dairy products.

BASIC PRICE		BASIC PRICE	
January		January	
F. O. B. Philadelphia	Per 100 lbs.	Country Receiving Stations	Per 100 lbs.
Grade B Market Milk		Grade B Market Milk	
Test Per Cent	Price Per Qt.	Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.	
3.05	7.1	Prices are less freight and receiving station charges.	
3.1	7.15		
3.15	7.2		
3.2	7.25		
3.25	7.3		
3.3	7.35		
3.35	7.4		
3.4	7.45		
3.45	7.5		
3.5	7.55		
3.55	7.6		
3.6	7.65		
3.65	7.7		
3.7	7.75		
3.75	7.8		
3.8	7.85		
3.85	7.9		
3.9	7.95		
3.95	8		
4	8.05		
4.05	8.1		
4.1	8.15		
4.15	8.2		
4.2	8.25		
4.25	8.3		
4.3	8.35		
4.35	8.4		
4.4	8.45		
4.45	8.5		
4.5	8.55		
4.55	8.6		
4.6	8.65		
4.65	8.7		
4.7	8.75		
4.75	8.8		
4.8	8.85		
4.85	8.9		
4.9	9		
4.95	9.05		
5	9.1		

JANUARY SURPLUS PRICES		JANUARY SURPLUS PRICES	
F. O. B. Philadelphia		CLASS I	
Test Per Cent	Per 100 lbs.	Test Per 100 lbs.	Per 100 lbs.
3.05	2.46	3.05	1.86
3.1	2.48	3.1	1.90
3.15	2.50	3.15	1.92
3.2	2.52	3.2	1.94
3.25	2.54	3.25	1.96
3.3	2.56	3.3	1.98
3.35	2.58	3.35	2.00
3.4	2.60	3.4	2.02
3.45	2.62	3.45	2.04
3.5	2.64	3.5	2.06
3.55	2.66	3.55	2.08
3.6	2.68	3.6	2.10
3.65	2.70	3.65	2.12
3.7	2.72	3.7	2.14
3.75	2.74	3.75	2.16
3.8	2.76	3.8	2.18
3.85	2.78	3.85	2.20
3.9	2.80	3.9	2.22
3.95	2.82	3.95	2.24
4	2.84	4	2.26
4.05	2.86	4.05	2.28
4.1	2.88	4.1	2.30
4.15	2.90	4.15	2.32
4.2	2.92	4.2	2.34
4.25	2.94	4.25	2.36
4.3	2.96	4.3	2.38
4.35	2.98	4.35	2.40
4.4	3.00	4.4	2.42
4.45	3.02	4.45	2.44
4.5	3.04	4.5	2.46
4.55	3.06	4.55	2.48
4.6	3.08	4.6	2.50
4.65	3.10	4.65	2.52
4.7	3.12	4.7	2.54
4.75	3.14	4.75	2.56
4.8	3.16	4.8	2.58
4.85	3.18	4.85	2.60
4.9	3.20	4.9	2.62
4.95	3.22	4.95	2.64
5	3.24	5	2.66

MONTHLY SURPLUS PRICES		MONTHLY SURPLUS PRICES	
4% at all Receiving Stations		CLASS I	
Test Per Cent	Per 100 lbs.	Test Per 100 lbs.	Per 100 lbs.
3.05	2.46	3.05	1.86
3.1	2.48	3.1	1.90
3.15	2.50	3.15	1.92
3.2	2.52	3.2	1.94
3.25	2.54	3.25	1.96
3.3	2.56	3.3	1.98
3.35	2.58	3.35	2.00
3.4	2.60	3.4	2.02
3.45	2.62	3.45	2.04
3.5	2.64	3.5	2.06
3.55	2.66	3.55	2.08
3.6	2.68	3.6	2.10
3.65	2.70	3.65	2.12
3.7	2.72	3.7	2.14
3.75	2.74	3.75	2.16
3.8	2.76	3.8	2.18
3.85	2.78	3.85	2.20
3.9	2.80	3.9	2.22
3.95	2.82	3.95	2.24
4	2.84	4	2.26
4.05	2.86	4.05	2.28
4.1	2.88	4.1	2.30
4.15	2.90	4.15	2.32
4.2	2.92	4.2	2.34
4.25	2.94	4.25	2.36
4.3	2.96	4.3	2.38
4.35	2.98	4.35	2.40
4.4	3.00	4.4	2.42
4.45	3.02	4.45	2.44
4.5	3.04	4.5	2.46
4.55	3.06	4.55	2.48
4.6	3.08	4.6	2.50
4.65	3.10	4.65	2.52
4.7	3.12	4.7	2.54
4.75	3.14	4.75	2.56
4.8	3.16	4.8	2.58
4.85	3.18	4.85	2.60
4.9	3.20	4.9	2.62
4.95	3.22	4.95	2.64
5	3.24	5	2.66

1928		Per Cwt. quarts		Per Cwt. cow.	
January	3.29	7.1	2.71		
February	3.29	7.1	2.71		
March	3.29	7.1	2.71		
April	3.29	7.1	2.71		
May	3.29	7.1	2.71		
June	3.29	7.1	2.71		
July	3.29	7.1	2.71		
August	3.29	7.1	2.71		
September	3.29	7.1	2.71		
October	3.29	7.1	2.71		
November	3.29	7.1	2.71		
December	3.29	7.1	2.71		
1929					
January	7.1	2.71			

### Keep Cows Contented

In cold, stormy weather dairy cows should be outdoors only long enough to drink and if the stable is comfortable and water available they should not go out at all except on clear, warm days. It pays to keep cows warm, dry, and comfortable at all times.



## Pennsylvania Dairymen's Association

(Continued from page 1)

to be successful must be carefully studied by the dairyman."

The closing address of the morning session was on "Improving Dairy Herds by Breeding," by M. H. Fohrman, United States Bureau of Dairying, Washington, D. C.

### Business Session

The afternoon meeting opened with a business session. Robert F. Brinton, secretary-treasurer read the minutes of the previous meeting and also presented a financial statement of the association.

The committee on Resolutions, F. M. Twining, Daniel Adams and F. J. Steele, presented a number of formal resolutions which, after discussion, were approved.

These resolutions referred to various phases of the industry and included among others a request that the State legislature continue to support with funds the protection of our live stock and to fully protect it from outside contagion. The National Congress was urged to provide adequate and equalized import duties on oils and fats and equivalent duties on raw materials and was further urged that no preferential duties be established with respect to commodities used or with respect to the countries from which the various oils and fats are imported. The National Congress was also urged to equalize the rates of duty on dairy products on the basis of their butter fat content. The National Congress was also urged, that after careful study of the tariff problem in relation to agricultural products and that such revision insure to agriculture the same protection as that offered to other industries. The Pennsylvania State Legislature was urged to make appropriations to cover the needs for indemnifying purposes as outlined by the Department of Agriculture. The continuance of the present program of research work by various Bureaus and the continuance of such work be urged for the eradication and care of diseases of farm animals.

Members of the Pennsylvania Dairymen's Association were urged to cooperate with the educational efforts being conducted by the various Dairy Councils, State Agricultural College and other properly recognized educational institutions to the end of bringing before all our citizens the health promoting and nutritional benefits to be derived from the free consumption of milk and its products.

A resolution was also adopted urging the present State Legislature to provide adequate appropriations for carrying on the program laid down by the Trustees of Penna. State College, and that at least \$300,000 of the amount appropriated for buildings, be used for the construction of a new dairy building and at least \$50,000 be expended for new equipment to bring our dairy department on a par with the needs of the Dairy Industry of Pennsylvania and with the equipment of other State Colleges.

A resolution commending the Governor of the Commonwealth for his act of including funds in his budget now before the legislature, for the erection of a satisfactory building for housing the Pennsylvania Farm Products Show in Harrisburg, Pa., was unanimously adopted.

### Officers Elected

A committee composed of R. W. Balderston, W. S. Wise and H. J. Northrop,

appointed by the president to serve as a committee on nomination, made the following report.

For officers to serve for the coming year, the following names are suggested: President, R. F. Brinton  
1st Vice President, L. M. Thompson  
2nd Vice President, M. T. Phillips  
3rd Vice President, W. F. Shrum  
Secretary-Treasurer, R. H. Olmstead, State College, Pa.

There being no further nominations from the floor, these candidates were on motion, declared elected to serve for the coming year.

Following the business session addresses were made by Norman S. Grubs, Philadelphia, Pa., on "Dairy Barn Improvement"; Parker C. Edward, United States Bureau of Agricultural Economics, Washington, D. C., presented a paper on "Methods of Production Essential to High Quality in Hay," while R. R. Gockley, Manager City Plant and Sales, Dairymen's League Cooperative Assn., Inc., read a paper on "The Importance of Quality in Dairy Products."

The session closed with an address by Prof. W. J. Fraser, on the subject "Less Expense, More Feed, More Profit."

### New Dairy Building at State College Urged

A representative group of the leaders of the industry held a further meeting to consider the necessity of a definite stand toward the erection of a new dairy building at Penn State College.

The present building erected 20 years ago is inadequate and unsuited for the purposes for which it is being used, and should be replaced as soon as possible with a building more in keeping with needs of the department and one that would compare favorably with such building and equipment at other similar institutions of learning.

It was pointed out that an allocation of \$300,000, from the present proposed building funds, should be, if possible, definitely set aside by the authorities of State College to care for this needed improvement with \$50,000 additional for equipment and that a committee be appointed to further such a program.

It was stated that the present dairy building was too small to house and provide facilities for teaching both dairy manufacture and dairy husbandry, together with the necessary laboratories incident thereto. The present building must reserve and provide space today for administration, dairy extension, dairy research, and for demonstrational commercial dairy manufacturing plant activities.

The following committee was named to present this request to the proper authorities: Dr. L. M. Thomson, W. S. Wise, H. D. Allebach, Henry Woolman and Alan H. Miller.

### Dairymen's Annual Banquet

The annual banquet of the Pennsylvania Dairymen's Association was held in the Masonic Temple, Prof. E. B. Pitts, president, serving as toastmaster.

Following the banquet brief addresses were made by E. S. Byard, Editor "The Pennsylvania Farmer"; Mr. Byard congratulated the association on the progress it had made in the past four years.

The dairy industry on the whole stands out in its success among agricultural

activities. It is better organized and is forging steadily ahead.

Hon. C. G. Jordan, secretary of Agriculture, referred to dairying as being the most satisfactory of all lines of agriculture. He touched upon the splendid growth that cow testing associations made in Pennsylvania, the continued progress of the work in eradicating tuberculosis and contagious abortion in cattle, and of the growth of the Pennsylvania Farm Products Show.

In this connection Secretary Jordan again referred to the program of the administration to provide funds for the erection of a satisfactory building for housing the show. A building that would do credit to the agricultural industry and one that could be used, when not needed for show purposes would be available for use in many ways.

### Cow Testing Ribbon Awards

C. R. Gearhart, of Pennsylvania State College, in making the awards of ribbons to members of the Pennsylvania Cow Testing Associations, said, "Ten years ago we had in the class of dairy herds producing 300 pounds of butter fat and over only 10 herds, five years ago there were 260 herds, this year we have a total of 724 herds, of which 449 had a butter fat content from 300 to 350 pounds; 202 with a butter fat content from 350 to 400 pounds and 73 herds with a butter fat content above 400 pounds."

These winners also automatically become members of the new organization formed at Memphis, Tenn., at the time of the National Dairy Show, and which is known as the "Guild of the Gopats."

A special award of a Silver Cup presented by the Holstein-Friesian Association, for the highest testing herd was announced by Mr. A. C. Craig, Pittsburgh, Pa. The cup went to Roy Bowen, Wellsville, Pa., with a herd test of 20,400 pounds milk and 656.6 pounds butter fat. He has a herd of 8 cows and the highest cow in the herd produced 27,255 pounds of milk with 946 pounds of butter fat. (For a list of members of the cow testing association in the Inter-State Milk Producers' Association territory who received ribbons, see page 8).

### Milk Awards

There were 191 samples of milk entered in the State Farm Products Show contest, and the samples ranked very good in flavor and odor, said George R. Taylor, in announcing the winners.

There were 10 prizes in the Class 1 grade.

### Raw Market Milk from Tuberculosis Tested Herds

	Score
Chester M. Stryker, Parkesburg.....	98.90
G. D. Mingle, Williamsburg.....	98.70
E. J. Hess, Waynesboro.....	98.65
B. D. Carter, Christiansburg.....	98.60
D. H. Mohler, Ephrata.....	98.55
Isaac Sherwood, West Chester.....	98.50
W. C. Randolph, Rogerstown.....	98.50
James Speer, Downingtown.....	98.50
Woodman & Smith, Wycombe.....	98.50
Claude Myers, Plumsteadville.....	98.50

### Raw Market Milk

M. B. Glick, Bird-in-Hand.....	98.35
E. W. Shrack, West Grove.....	98.10
J. D. Bunting, Oxford.....	97.95

### Certified Milk

Delchester Farms, Edgemont.....	98.15
Pennhurst Farm, Narberth.....	94.25

Dr. Frederick Taylor, Pulaski .....77.90  
Lenkerbrook Dairies, Harrisburg.....76.70

### Pasteurized Milk

J. E. Harshbarger, Altoona.....	98.70
Supple-Wills-Jones Milk Co., Philadelphia.....	98.60
Greenville Dairy, Greenville.....	98.25
Moore Brothers, Meadville.....	98.00
Jno. H. Shenk, Lancaster.....	98.00
C. Stanley Hess, Lancaster.....	97.05

### Farm Butter

John E. May, Dover.....	94.50
James W. Landner, Sherksville.....	94.00
A. S. Ryde, Chambersburg.....	94.00

### Creamery Butter

Hershey Creamery Co., Hersey.....	93.50
Greenville Dairy Co., Greenville.....	93.00

### Special Prizes

B. D. Carter, Hollidaysburg, received the Holstein-Friesian Club award, a silver loving cup, for the best sample of milk from a purebred or grade Holstein herd—Score 98.60

W. C. Randolph, Royersford received a silver loving cup from the American Jersey Cattle Club, for the best sample of milk produced by registered Jersey herd, free from tuberculosis—Score 98.50.

Two special silver prizes were awarded by the Guernsey Breeders' Association, one, for the best sample of milk from a registered Guernsey herd, went to Woodman & Smith, Wycombe, Pa.—Score 98.50; the other for the best sample of milk from a grade Guernsey herd went to Chester M. Stryker, Petersburg—Score 98.90.

The Philadelphia Inter-State Dairy Council, awarded a prize, a Stewart Clipping Machine, for the best sample of milk to a farmer holding a permanent permit, issued by the Dairy Council. The award went to Chester M. Stryker, Petersburg, Pa.

A special prize offered by the Dairymen's League, Inc., a Stewart clipping machine for the best sample of milk produced by a League member, was won by B. M. Fairchild, Lewisburg, Pa.

### Clyde L. King Makes Noteworthy Address

An outstanding address on "The Economics of the Dairy Situation" was forcefully presented by Dr. Clyde L. King, Wharton School, University of Pennsylvania. Dr. King divided his subject into several groups, including the following—Money and Credit; Group Legislation Proposed for Farm Relief; Tariff and the Federal Marketing Board. Dr. King believes in a policy that will give the best for the country on some sound fundamental basis of permanency. The solution of our many difficulties may come in part from the establishment of a Federal Farm Marketing Board. One, the members of which can and do understand our problems, one that can plan and develop marketing, one that can plan transportation developments, one that can open our barge canals and one that can follow marketing at home and abroad.

He said, "Plan for the future by means of orderly regulation, grade products to meet demand and conduct business upon ethical lines. This can be done by good marketing methods carried out by co-operative marketing organizations and it means cooperation from the bottom to the top."

Guess in haste and repent in leisure. Plan in time and all is fine.

## Electrifying the Farm and Home, a Show Feature

How to get electricity and what it will do was very much on the minds of the Farm Show visitors. From twelve to fifteen rural service men and home demonstrators were kept busy throughout the Show answering questions or demonstrating the equipment. The display of Utility Farm Motors, in which the

The electric refrigerator is appreciated for its saving many steps which would otherwise have to be made to the well or spring and also for saving much food which often times spoils was clear, from the interest shown in this appliance.

A large painted background portraying a farm house and barn showing in



5 H.P. motor was shown grinding feed, cutting wood and running a silo filler, attracted a crowd at all times. Many could not believe that the 5 H.P. motor would do the work but were convinced when they saw it in operation. This exhibit was a demonstration of the methods that have been worked out in

outline the wiring system of both, together with flashing lights throughout the buildings, emphasized what a complete wiring installation and lighting job should look like.

For those who wished to go through the complete operation of electric cooking a series of Lecture Demonstrations



research work by the Farm Machinery Department of the Pennsylvania State College.

There were less questions as to how to secure service and more as to the use of different equipment than last year. The electric poultry brooder drew the most questions although a large number were interested in the milk cooling unit shown. The electric milker also came in for many questions.

The household appliances were of general interest. The spaces around the electric ironer and the electric ranges were crowded most of the time, while many were also interested in the water system and water heating.

were held featuring the cooking of farm dinners, roasting beef and a chicken, broiling steak, together with all the other items of a dinner. From the interest of those attending, it is clear that electric cooking is rapidly coming to the front in the rural districts.

The Rural Electrification Exhibit was made possible through the cooperation of the Pennsylvania Joint Committee on Rural Electrification and the Farm Products Show Commission. With over 105,000 rural customers on rural lines in Pennsylvania of which over 25,000 are farms and as many more rural people desiring service, the problems of rural electrification are now of major interest.

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ARE you getting a proper return for your investment, and your labor, in your milk herd? If your feeding methods aren't quite right you will note a shrinkage in your receipts about this time of year. We can't guarantee to make you rich, but—Quaker (24%) Dairy Ration is a most important factor in the business of many successful dairymen. It is a big help to maximum production. It combines perfectly with your own roughages. Essential minerals in digestible form, and fresh pure ingredients make Quaker (24%) Dairy Ration a winner. See your Quaker Dealer and keep your milk checks up.

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### Jersey Cattle Club Prizes

Beiford County was announced the winner of the American Jersey Cattle Club contest in this state, at the annual meeting of the Pennsylvania Jersey Cattle Club. A \$100 prize was the award.

Other counties high in the contest were Indiana, Crawford, Mercer, Montgomery, Wayne and Butler. Scores were determined upon a six-sided program of work. Getting members for the breed association, the number of 300 pound butterfat producers, cows on official test, animals exhibited, members of 4-H calf clubs and proven sires in use in the county.

W. C. F. Randolph, Royersford, was elected president of the Pennsylvania Jersey Cattle Club.

### Philadelphia Inter-State Dairy Council Incorporated

General Offices  
Flint Building, Philadelphia  
A co-operative movement established for the dissemination of information and publicity pertaining to the production and distribution of dairy products and their food value in nutrition.

Affiliated with the National Dairy Council

Officers  
Dr. Clyde L. King, President  
H. D. Allebach, Vice President  
R. W. Balderston, Executive Secretary  
R. J. Harbison, Jr., Treasurer

Departmental Branches  
C. I. Cohee, Director Quality Control Department  
Lydia M. Broecker, Nutrition Department  
Del Rose Macan, Dramatic Department



## Cow Testing Association Ribbon Awards

A list of Cow Testing Association members, in the Inter-State Milk Producers' Association territory, who have during 1928, exceeded the goal of an average of 300 pounds of butter fat during the year. The groups are listed by counties and associations.

Adams County	Adams Association	Milk	Butterfat
R. M. Spangler	Gettysburg, No. 7	12050	387.1
Elmer A. Bubb	East Berlin	10473	349.5
Millard Baschoar	Littlestown	10661	347.3
Hiram H. Miller	Fairfield	9958	322.8
Edgar H. Leer	York Springs	9996	322.3
T. N. Cashman	York Springs	9843	322.0
Harry E. Brown	Fairfield	9459	312.4

Bedford County	Bedford Association	Milk	Butterfat
Allen R. Eshelman	Everett	7546	432.2
E. S. Ferry	New Enterprise	7646	428.9
Stanley Koonitz	Bedford, No. 4	7438	416.9
George Greenwalt	Hopewell	7524	410.5
George Morgart	Rainsburg	7990	410.2
Harry Clark	Breezewood	6914	401.1
McKinley Way	Everett	7749	397.5
John E. Morris	Everett, No. 3	6955	384.0
Ernest Replogle	Loysburg	8506	383.3
Fred W. Cox	Everett	7499	382.6
Samuel L. Cessna	Bedford, No. 4	9859	378.1
John L. Baughman	Everett	6179	372.0
C. E. Koonitz	Lutsville	6482	365.9

Bucks County	Middle Bucks Association	Milk	Butterfat
J. M. Geddes	Dunlora	6749	390.8
E. J. Ivins	Peaserville	10081	382.0
L. P. Satterthwaite	Newton	11490	379.7
W. N. Hunsberger	Plumsteadville	11400	375.9
P. W. Smith	New Hope	7598	359.9
C. L. Wilkinson	Rushland	10015	343.4
J. H. Cliffe	Ivlyland	7363	321.7
L. C. Benner	Langhorne	9063	316.0
Jos. Canby & Son	Hulmeville	9053	311.1
George S. Havens	New Hope	6139	308.3
E. B. Morris	Bristol	6106	307.9
H. M. Walton	New Hope	6928	306.0
J. S. Parry	Rushland	6613	300.7

Chester County	Chester Valley Association	Milk	Butterfat
Mrs. Mary N. Carter	Pocopson	8064	396.1
David Byerly	Glen Moore	7742	375.3
C. Albert Fox	Pocopson	6907	369.1
Wallace C. Pearson	West Chester	6825	366.6
C. E. Mather	West Chester	8079	362.6
James Latta	Parkeburg	7492	341.5
David Stoltzfus	Elverson	6870	323.6
Wm. M. Lloyd	Downingtown	6108	318.1
Fairlamb Beale	Coatesville	6528	317.4
Richard L. Fox	Downingtown	6682	315.5
Edw. Hoopes	West Chester	5736	310.2
Jonathan P. Styer	Glen Moore	8080	309.5
Hayes C. Taylor	Embsville	6100	307.9
Albert W. Hoopes	West Chester	6309	302.0
N. K. Beach and Chas. Ash	Parkeburg	6314	301.9
Harry Dague	Whitford	6464	300.0

Chester County	Covey Association	Milk	Butterfat
State Institution	Pennhurst	11567	404.6
Porter Farms	Phoenixville	7480	374.2
Arthur High	Pottstown, R2	10351	361.4
H. L. Stoltzfus	Pottstown, R2	10191	347.5
Wm. High	Phoenixville, R4	9982	336.0
Harry J. Bickel	Pottstown, RD	9234	323.5
F. H. Harjes, Jr.	Valley Forge	6663	321.8
Furman H. Gyger	Kimberton	8404	306.3
Henry Suptot & Sons	Phoenixville	8722	305.6
N. A. Matthews	Pottstown, R2	7725	300.9

Chester County	Oxford Association	Milk	Butterfat
Norman Thompson	Oxford	8304	375.8
Harold & L. O. Hansen	Oxford	10644	384.3
J. S. Reisler	Calvert, Md.	7685	352.9
James Hastings	Kirkwood	6245	314.5

Chester County	West Chester Association	Milk	Butterfat
Wm. I. Reeves	West Chester RD	7230	345.4
R. E. Sharpless	London Grove	6810	344.0
M. L. Jones	Westtown	9445	314.1
Garrett-Winson Lodge	Newtown Square	8683	313.8
Wm. B. Rhoads	Oakbourne	6870	304.4

Cumberland County	Cumberland No. 1 Association	Milk	Butterfat
I. V. Otto	Carlisle, R6	12600	435.5
Paul Gible	Mechanicsburg, R2	11953	423.1
E. R. Shughart	Carlisle, R9	11750	406.3
J. H. Lear	Carlisle, R5	10728	392.1
E. C. Lutz	Carlisle, R5	11354	383.4
H. K. McCullough	Newville, R1	7838	361.6
A. E. Rider	Mechanicsburg, R5	9753	340.0
J. W. Raudabaugh	Carlisle, R7	10326	337.9
H. B. McCormick	Harrisburg	7018	333.0
A. N. Lehman	Carlisle, R2	9403	331.2
Geo. E. Wilson	Mechanicsburg, R2	8882	328.8
J. N. Kruger	Carlisle	7848	328.6
William S. Ker	Carlisle, R9	9672	325.0
J. B. Sellers	Carlisle	8665	318.5
Albert Kost	Carlisle, R7	9147	309.6
Paul Lehman	Carlisle, R2	7723	306.4
Miss Anne McCormick	Harrisburg	6749	303.1
S. W. Zeigler	Mechanicsburg, R1	8591	303.1

Cumberland County	Cumberland No. 2 Association	Milk	Butterfat
Harry Shultz	Carlisle, R6	10287	360.6
A. G. Wingert	Mechanicsburg, R5	10864	356.4
Hugh McMeen	Carlisle, R6	9569	353.5
William G. Minnich	Carlisle, R6	9864	347.3
Loy F. Hare	Boiling Springs, R1	10708	341.4
W. A. Woods & Son	Carlisle, R8	9542	324.7
Harold Evans	Carlisle, R8	8818	310.1
J. Paul Wrightstone	Camp Hill, R1	9353	306.4
Geo. Raudabaugh	Carlisle, R4	8565	306.6
John W. Myers	Shippensburg, R1	9264	300.9

Franklin County	Southern Franklin Association	Milk	Butterfat
J. A. Gsell	Chambersburg	9672	360.2
John Martin & Son	Smithsburg	9464	334.1
G. D. Baumgardner	Waynesboro	7722	330.9
J. Myers & Son	Waynesboro	7982	327.5
C. Barnhart	Chambersburg	9379	315.4
D. E. Rinehart	Smithsburg	7357	312.4
Cyrus Stauffer	Smithsburg	8597	303.3
Herman Oller	Waynesboro	6691	303.3

Franklin County	Western Franklin Association	Milk	Butterfat
John Aughinbaugh	Mercersburg	8082	357.5
Howard S. Myers	Mercersburg	7419	336.2
J. W. Hoffeditz	Mercersburg	7033	319.8
C. T. Howbaker	Greencastle	8148	310.7

Huntingdon County	Huntingdon Association	Milk	Butterfat
A. S. Eilenberger & Son	Warriors Mark	9511	555.6
P. W. Eyer & Son	Tyrone, R5	9769	363.7
Harry R. Oaks	McAlevy's Fort	7747	349.1
H. L. Grazer	Warriors Mark	8779	341.4
Guy M. Neff	Alexandria	8228	338.6
Taylor Brothers	Warriors Mark	8200	336.6
John T. Martin	Alexandria	9378	332.3
Norman E. Black	Alexandria	8317	331.7
Walter Henderson	Petersburg	8327	330.6
J. Harry Stewart	Petersburg	8208	327.2
J. B. & H. B. Tussey	McAlevy's Fort	8718	323.7
A. L. Guyer & Bro.	Tyrone, R1	9421	319.3
Geo. Rumbarger & Son	Warriors Mark	8627	319.1

Juniata County	Juniata Association	Milk	Butterfat
E. J. Cunningham & Son	Millintown	14131	453.2
J. W. Seiber	McAlisterville	11341	376.7
Theodore Kauffman	Millintown	11798	366.7
J. I. Clarke	Port Royal	9850	359.4
C. I. Degen & Son	Millintown	10036	357.6
Geo. W. Colyer	Millintown	10007	344.8
T. R. Ayler	Millintown	10095	342.2
C. D. Stouffer	Port Royal	10331	332.2
C. A. Musser	Oakland Mills	9576	329.9
H. I. Gray & Son	Honey Grove	9819	326.7
Lloyd Heckman	Millintown	10644	323.3
W. E. McMeen	Port Royal	9745	314.6
Karl A. Fetting	Millintown	9172	313.2
Carl L. Smith	McAlisterville	9256	309.9
E. G. Ferguson & Son	Millerstown	8580	303.3

Lancaster County	Garden Spot Association	Milk	Butterfat
Ira M. Eby	Gordonville	11457	376.9
Mast Stoltzfus	Morgantown	11289	375.9
Elmer Stoltzfus	Elverson	9874	346.6
George G. Sauder	East Earl	9455	317.7
M. V. Brubaker	New Holland	9656	304.2

Millifin County	Millifin Association	Milk	Butterfat
Rufus H. King	Belleville	12335	417.2
S. M. Yoder	Allensville	11352	407.7
A. C. Yoder	Allensville	9058	374.3
Rudy J. Yoder	Belleville	10744	373.7
J. B. Byler	Belleville	9987	376.2
U. K. Peachey	Belleville	11010	369.0
Elmer Yoder	Allensville	9870	353.9
H. H. Bradford	Lewistown	10477	352.7
Jacob T. Yoder	Belleville	9509	350.6
David E. Peachey	Belleville	10620	342.7
B. R. Byler	Allensville	9525	338.3
S. C. Mitchell	Lewistown	9104	334.8
McClue Snyder	Lewistown	10655	331.3
R. F. Brown	Mill Creek	9051	330.0
Pius Kanagy	Belleville	9472	327.8
Fern Aurand	Lewistown	9149	309.6
W. J. Brown	Mill Creek	8648	308.5
Harvey P. Yoder	Belleville	7048	306.5
John O. Weir	McVeytown	8257	306.2

Montgomery County	Montgomery No. 1 Association	Milk	Butterfat
Wm. H. Landis	East Greenville	11979	419.6
J. Schultz Est.	Palm	10073	355.2
Compton Farm	Chestnut Hill	6215	349.4
Jrsius College	Collegeville	9714	335.1
Owen S. Gerhard	Palm	9611	334.6
W. C. F. Randolph	Royersford, RD	6177	331.3
H. D. Allebach & Son	Trappe	9231	329.2
E. Wm. Haywood	Ambler	6515	327.8
Camp Discharge Farm	Conshohocken	6774	323.7
D. M. Woodward & Sons	Pennsburg, R1	7739	309.8
L. K. Rothenberger	Worcester	9709	309.5
Willow Creek Farm	Penlynn	6774	307.7
J. L. Wood & Sons	Red Hill	8927	305.4
Warren G. Schultz	East Greenville	8528	303.8
Charles E. Longacre	Royersford, R1	8752	302.2
Mrs. Howard Bieler	East Greenville	8743	300.1

York County	Northern York Assn.	Milk	Butterfat
Norman E. Rishel	York, No. 8	11478	392.3
J. Raymond Arnold	Mt. Wolf	7420	360.4
C. J. King	Mt. Wolf	7052	357.0
J. A. Poorbaugh	York, No. 8	7720	354.5
J. J. Hamme	Abbotstown	6678	352.4
C. Allen May	Dover	7156	350.9
Walter W. Little	Hanover	7684	348.8
H. M. & M. B. Emig	Hellam	7878	325.2
Frank L. Krall	East Berlin	9502	323.4
T. G. Cooke	Dillsburg	7331	319.9
W. F. Dummer	Mt. Wolf	8520	317.5
Elmer Elchelberger	Lewisberry	9116	311.6

York County	Southern York Association	Milk	Butterfat
J. R. Showalter	Woodbine	9914	369.1
J. S. Murphy	Woodbine	10500	350.8
W. S. Grimm	Red Lion	10114	344.3
G. W. Wambaugh	Delta	7904	344.3
N. S. Sellers	Lineboro	8853	337.8
Dale D. Kilgore	Woodbine	8219	335.8
E. C. Wiley	Delta	7850	327.3
C. R. Posey	Woodbine	8970	320.5
C. E. Fridinger	Lineboro, Md.	9019	318.5
M. E. Webb	Fawn Grove	6817	318.5
Clyde Snodgrass	High Rock	8802	308.4

## Penna. Farm Products Show

(Continued from page 1)

Fourth and Chestnut Streets, the poultry and pigeon exhibit were shown.

Many of the exhibits were of an outstanding character and obtained the close attention of the many visitors.

## Show Formally Opened

On Tuesday evening, January 22nd, the Farm Products Show was formally opened with a Joint Meeting of all associations, which was held in the Chestnut Street Auditorium. Upwards of 2000 people attending the meeting. Secretary of Agriculture, Dr. C. G. Jordan, acted as master of ceremonies. He formally introduced the various members of the State Farm Products Show Commission, former Secretary of Agriculture Frank P. Willits and a group of County Agents and Home Economics workers. H. J. Walker and Son, Kennett Square, Pa., the potato king of Pennsylvania; Mrs. North Schellenberger, McAlisterville, the Queen of the egg producers, and L. A. Zimmerman of Lehigh County, the outstanding dairyman of the State for the past year.

During the session vocal music was rendered by the group of County Agents, under the direction of County Agent McWilliams.

Secretary Jordan in opening the meeting referred to the wonderful agricultural development of the State during the past twenty-five years. Steady growth and progress is to be noted. This he likened to certain fundamental facts, and these have resulted from the application of science. "The application of science," he said, "has helped to work out our problems. There have been many scientific developments in farm equipment, in the development of seeds, in feeding farm animals. Facts have also been developed in our human nutrition, the vitamins are among those—our soils among other things are given a thorough study by our experiment stations. Exercise, sports, team work, one backing up the other, in production. Merchandizing in every thing. We must learn that moving forward, hand in hand spells ultimate success."


## Farm Products Show Building

Secretary Jordan then announced the program for a Farm Products Show Building, a plan which has had the approval of the Governor and one that has been included in the present appropriation bill now before the Legislature. The proposed building is to be 700 feet square, it will cover a ground area of 11 acres and will have available for exhibit purposes about 400,000 square feet. The building will cost to erect about \$1,340,000 which has been set aside for this purpose, together with a further appropriation of \$56,000 for maintenance purposes during the next bi-ennium.

Addresses followed by M. S. McDowell, Extension Department, Pennsylvania State College; E. S. Bayard, Editor, "Pennsylvania Farmer"; L. H. Dennis, Director, Vocational Schools, Department of Public Instruction, and E. B. Dorsett, Master, Penna. State Grange.

## Group Meetings

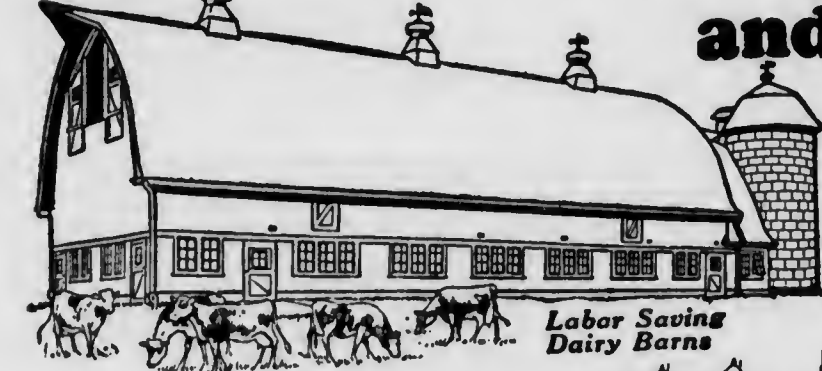
More and more interest continues to be shown in the various agricultural group meetings that are being held during Farm Products Show week. In many cases record attendances were reported. Aggregate attendances of upwards of 1000 farmers at some of these meetings are not uncommon. At the



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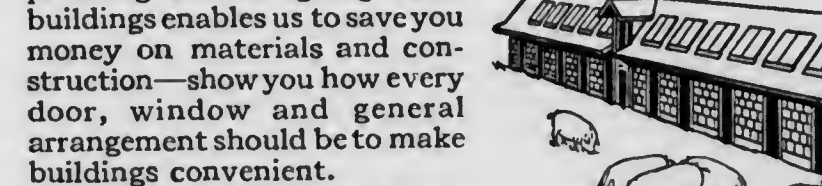


### and Saves Costly Mistakes

If you are thinking of building, remodeling or ventilating a cow or horse barn, hog or poultry house, or if you are considering the purchase of labor and time-saving equipment for such buildings, by all means, fill out coupon in this advertisement and let us send you free our valuable Jamesway book.

This book will show you how you can save money and have your buildings planned and equipped so that they are most convenient and practical. If you will avail yourself of Jamesway service, you'll have the same gratifying experience as H. L. Hartly, Manager of Island Farms, Duluth, Minn. Here's what he writes:

"We very much appreciate the splendid architectural service you have rendered us. The ability you showed to adapt plans to meet results desired were a revelation to me. Your suggestions saved me considerable in material and time."



Time Saving, Money Making Hog and Poultry Houses

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Please send me your NEW Jamesway BOOK. I am interested in

☐ Building ☐ Remodeling ☐ Equipping ☐ Ventilating

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☐ Hog House ☐ Poultry House

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Post Office.....

R. F. D.....State.....

If You Raise Poultry Ask For Our Poultry Equipment Book

Shows our full line of Feeders, Waterers, Steel Nests, Coal Brooders, Baby Chick Supplies, etc.



## SAVE LABOR

### Increase Crops

## Combined Roller-Harrow

### TWO IMPLEMENTS IN ONE

two operations at one time, and performed by one man with a single team. The harrow levels the ground, brings the clods to the surface while the roller crushes the clods and packs the soil. A fine implement with which to prepare the seed bed





### Birth Registration in Penna.

The following reasons for birth registration are important for every parent or guardian to know:

- To comply with the law.
- To prove age, parentage, nationality, and therefore citizenship.
- To prove inheritance rights.
- To prove the right to attend school.
- To prove the right to work.
- To prove the right to vote.
- To prove the right to marry.
- To prove the right to hold office.
- To prove the right to military service.
- To prove the right to enter professions.
- To prove the right to enter civil service.
- To prove the right to join the army or navy.
- To prove the right to establish ability to make contracts.
- To prove the right to travel abroad.

### Who Handles the Cash?

At this time of the year when discussions of household budgets are uppermost, the question arises as to whether husband or wife should handle the accounts. Some say that it is the duty of the man of the house; others maintain it is the privilege of the woman. The general impression is that the wife does most of the household spending, since the cost of food, housing, and clothes constitute the largest share of the family outlay. Hence it is sometimes held that the woman should keep the accounts and pay the bills. The real answer is that the account-keeping and the bill-paying should be done by the member of the household who is best qualified to do it. In a good many homes the woman is the one who not only has the greater familiarity with handling the funds, but also has the better head for finances. An ideal plan, which works in only a few households, however, is to pay everything by check and to have each check signed jointly. Then each one knows, and is interested in, how the family finances are faring.

### Clean Silver Easily

No modern housekeeper in this enlightened day is willing to spend unnecessary time over any household task. Cleaning the family silver is one of those jobs which may be done easily and quickly or may be labored over for hours, according to the method chosen. Chemistry has shown that silver may be cleaned quickly and effectively by the electrolytic method—using materials which will cause the tarnish to react and disappear. An aluminum pie plate or cover should be placed in a large dishpan of tin or enamel ware and the pan should be nearly filled with water. Add one teaspoonful of salt and one of baking or washing soda for each quart of water. Lay as much silver in the pan as can be immersed in the water and let the water boil for five minutes. Remove the silver to a pan of hot soapy water, wash thoroughly, rinse and dry. Large pieces such as coffee pots and vases may be cleaned in sections if it is not possible to entirely immerse them.

### The Baby's Room

The baby is entitled to a room where sunshine and fresh air pour in. He should have a bed to himself, a box, or a basket with a piece of folded blanket or felt for mattress, and this covered by water-proof material—rubber or oil cloth. Metal cribs, can be satisfactorily used until outgrown. A side that slides up and down can be used with the side down until baby is old enough to roll. When down it should come up above the mattress five or six inches to keep baby from rolling out of bed.

### Baby's Habits

A baby has no habits at birth. But he quickly becomes a bundle of good or bad ones. He is not to be either praised or blamed for the kind of habits he first forms. You are responsible for them. Settle it early, whether he shall rule the home unwisely, or you shall rule it wisely.



"AT THE WORLD'S DAIRY BANQUET"

U. S. Department of Agriculture Display used by the Dairy Council at the Penna. Farm Products Show

Milk and its products have been food for human kind since the beginning of human life on the earth. Probably due to the climatic difference in different parts of the world, dairying has become an industry more prominent in some sections than in others. The amount of dairy products used by peoples of different countries varies with the country and with the particular product in question. This engraving above shows the extent to which the various, so-called, dairy countries consume various products.

Apparently Uncle Sam's appetite lags behind. The little country of Denmark leads in the consumption of fluid milk. Each individual in that country is supposed to consume a pint and a half of milk a day.

Our neighbor on the north, Canada, leads in the per capita consumption of butter. 1.12 ounces of butter is the daily per capita consumption in Canada.

We would naturally expect that Switzerland would be the leader in the consumption of cheese, and this is true.

### Saintship

Never talk to me of martyrs and of heroines of old,  
Joan of Arc and Clara Barton and the rest—

Did you ever do a baking with the oven growing cold,  
While the kitchen stove was smoking like possessed?

Finer far than any hero of a battle, fire, or flood,  
Is the woman who can take it as a joke,

And still remain the mistress of a philosophic mood,  
With her eyes and nose and kitchen full of smoke!

When the wood is green and sizzling and the wind is in the east,  
And the dinner is already over-late,  
She who keeps serene and smiling, and does justice to the feast,  
She is qualified to conquer any fate!

—Rose Goodale Dayton.

### Council Holds

#### Cooking Institute

The matrons of the open air classes of the Philadelphia public schools and the supervising nurses, together with their director, Dr. Dorothy M. Child, gathered in the offices of the Dairy Council for a one-day Institute in Cooking for Children, on February first.

In the open air classes three meals a day are served to the pupils. When the children arrive at school they are given a "half-breakfast" of fruit and cereal. At noon they have a hot nourishing meal, followed in the middle of the afternoon by a lunch of milk and crackers.

From city funds, there is an allowance for each child's food of a quart of milk and eleven cents a day. It was the object of the Council's Institute to cooperate with these matrons and nurses in studying ways and means of securing the best results for the children's physical welfare from these limited funds. Many of the points brought out in the demonstrations by the Council's Nutrition Department are of value to every mother who must think in terms of child feeding.

Actual demonstrations were made in using cereals, vegetables, fruits, and simple desserts. Special emphasis was given to the subject of cereals. Almost everyone has encountered difficulty in the matter of children's breakfasts. If a light supper has preceded the night's sleep there will likely be a healthy appetite for the morning fruit, cereal, and glass of milk.

#### The Use of Cereals

Someone has said that the Civil War in the United States has never been ended—that it is fought every morning by children over their cereal! A secret in avoiding this daily battle was shown to lie in serving properly cooked cereal and in varying both the kind and the way in which it is served.

Oatmeal and whole grain cereals are economical and very nutritious. The occasional addition of raisins or mashed prunes is excellent. For an element of surprise, place a small spoonful of bright jelly on the top of the cereal, or in the saucer before filling it. The use of little or preferably no sugar on the cereal is advocated by most child specialists.

A crisp toast made from thin slices of wheat, graham or white bread gives the young teeth needed exercise. Hot breads are to be entirely avoided. As for eggs, these may best come later in the day.

As for green vegetables at dinner-time, here again variety is an important factor. The Nutrition Department demonstrated cream of spinach soup, and suggested that other vegetables such as tomatoes be used in the same way. Scalloped cabbage with cheese furnished another opportunity for the use of milk.

Small amounts of vegetables from the preceding day may be added to mashed potato as an attractive "Left Over Dish." Instead of mixing the combination, it was suggested that occasionally it be composed of layers of the vegetables being used.

### Keystone Club Members Set New Marks in Work

Pennsylvania 4-H club work enjoyed increased interest and membership in 1928. J. F. Keim, assistant state club leader of the Pennsylvania State College, declares.

There were 4476 boys and girls enrolled, a gain of 437 over 1927. Club work was part of the agricultural extension program in 61 counties with an average of 73 members per county. Seventy-six of those enrolled completed their work, Keim says. Many noteworthy accomplishments marked the year.

Seventeen boys grew over 400 bushels of potatoes on measured acres and thus became eligible for the Keystone 400 Bushel Club.

In Lackawanna county seven boys joined the Carbondale Capon Club. They started with 20 birds each, finished the season with a loss of only five birds and cleared \$25 each after paying the loans to their sponsors.

A sweet corn club in York county had 17 members, each of whom grew an acre of corn. They averaged four tons of corn per acre and divided a prize fund of \$200 at the round-up.

Grant Reber, a celery club member in Berks county, netted over \$300 on one-half acre of celery he grew in garden club work.

Thirty-two celery club members in Schuylkill and Carbon counties grew 500 stalks of celery apiece and averaged a profit of \$25.

Alonzo Frederick, of Westmoreland county, is the junior strawberry king. He paid himself for labor and all other expenses and still had \$79.89 from 902 quarts of berries grown on one-twentieth of an acre.

George Cole, a 14-year-old dairy and strawberry club member of Westmoreland county, was selected as the best 4-H club worker in the 17 counties traversed by the Baltimore and Ohio railway. From the railroad he received a scholarship for \$100 to be used in school or for educational trips.

### Woman Poultry Queen

Mrs. North Shellenberger, of McAlisterville, was named the poultry Queen. Her flock of chickens had the highest percentage of birds laying more than 200 eggs in 365 days. The highest bird in her 125 entries laid 282 eggs during the inspection period and 43 per cent of her flock laid more than 200 eggs.

### Liver

The iron and vitamin content of liver make it a valuable addition to the diet for both adults and children.

#### Liver Creole

- 1 lb. liver
- 3 tbsp. cornstarch
- 2 tbsp. drippings
- 1 c. cold water
- 1 c. chopped onions
- Season and taste
- 1 1/2 c. stewed tomatoes

Cut liver in thin slices. Remove skin and veins and wipe with a damp cloth. Roll in flour and fry in hot fat until golden brown. Add onion, tomatoes, cornstarch, dissolved in cold water, cover and cook slowly for 10 minutes, then add seasoning to taste, cover and cook slowly 10 minutes longer.

Put straw in the loft of your poultry house and it will keep your flock warmer in winter and cooler in summer. Straw has insulating properties.

# \$420

## EXTRA IN TEN MONTHS

Long time production records on 57,462 average herd cows show Cow Chow made 7 cents extra profit per cow per day. In a herd of 20, through an ordinary lactation period, this is an extra net profit of \$420!

The figures tell the story in no uncertain manner. Here they are in detail:

	COW CHOW	OTHER FEEDS
Milk per cow per day	25.89 lbs.	22.75 lbs.
Value @ 3¢ per lb.	\$ .77	\$ .68
Cost per cwt. of feed	\$2.68	\$2.37
Profit over feed cost per cow per day	\$ .52	\$ .45
Extra profit with Cow Chow . . . . .	\$ .07	

These records are still coming from hundreds of milk producers, all over the country. They are telling Purina field men their costs, no matter what feed they may be using. Adding these up and averaging them, we have the most astonishing and most valuable feeding information ever placed before American dairymen.

Cow Chow comes out ahead in this impartial survey. You will come out ahead if you feed Cow Chow for a year.

PURINA MILLS, 854 Gratiot St., St. Louis, Mo.  
Sold at the stores with the checkerboard sign in the United States and Canada

# with PURINA COW CHOW



### PHILADELPHIA INTER-STATE DAIRY COUNCIL

The various departments are at your service and will assist you in planning

#### EDUCATIONAL ENTERTAINMENT

for your Community, Local or Club Meetings. Lectures, Speakers, Motion Pictures, Lantern Slides, Etc. Write us for detailed information and program

R. W. BALDERSTON, Sec'y, 219 North Broad Street, PHILADELPHIA



"Our Husbands Company's Laboratory and buildings at Lyndon, Vt., established in 1899, where O-H goods, are made and tested in the O-H Dairy Herd."



## Increase your milk production this way~

In the formula for O-H COW TONE is found a combination of mineral and vegetable powders that is JUST RIGHT FOR COWS. It supplies certain elements that cows need if they are to do well during the winter months. Try the Cow Tone this winter—a tablespoonful twice a day mixed with the grain. The gain in milk will prove that profits come only through the correct physical conditions of your cows, and that the O-H way is the right way.



A group of seven grade Jerseys bought into the O-H Dairy Herd for demonstration developed two 45 lb. cows. The average test for the seven was 4.8 last winter.

OUR BOND is on every package of O-H goods. Your money back if you are not satisfied.

**O-H COW TONE** for Milk Production  
**COWS' RELIEF** for Udder and Teat Troubles  
**CALVES' CORDIAL** for Scours

O-H goods have been on the market with dealers and jobbers for years. If more convenient for you we will send them prepaid, if requested, on receipt of price. Cow Tone 50c - \$1.00, or 25 lb. box \$4.50, 50 lb. box \$8.25. Cows' Relief 50c - \$1.00. Calves' Cordial 50c.

OUR HUSBANDS CO. - LYNDON, VT.



Send for the O-H Cow Book

## Plow with the Farmall!



The Farmall pulls a two-bottom plow as ably as does any other tractor. Unlike other tractors plowing is but the commencement of the Farmall's yearly labors. As the season progresses you can shift from one important job to another with amazing speed. After plowing, tilling, seeding, planting row crops (with a four-row planter), cultivating row crops (with two or four-row cultivators), mowing, raking, loading hay, harvesting and doing all of your belt jobs around the farm.

You can't beat a Farmall. It turns short, handles easily, operates economically and requires very little attention.

Let your nearest dealer demonstrate it to you.

The International Harvester Co.  
of America

Philadelphia Harrisburg Baltimore

## Report of the Quality Control Department Philadelphia Inter-State Dairy Council

The following is a report of the work done by the Quality Control Department of the Dairy Council, for the month of December, 1928.

No. Inspections Made	1787
Sediment Tests	3736
No. Permanent Permits Issued	190
No. Temporary Permits Issued	85
No. Meetings Held	11
Attendance	586
Reels Movies Shown	61
Days—Fairs and Exhibits	15
Bacteria Tests Made (Plants)	17
No. Miles Traveled	17468

During the month 32 dairies were discontinued from selling for failure to comply with the regulations—13 dairies were reinstated before the month was up.

To date 122,708 farm inspections have been made

M. H. McKnight, Carlisle, Cumberland county, was elected president of the Pennsylvania State Poultry Association in its annual convention in Harrisburg, Pa. M. B. Doughton of Royersford was elected vice-president and H. M. Funk of State College was elected as secretary-treasurer.

The poultrymen approved an appropriation of money by the State Association to the National Poultry Council for work in connection with a higher tariff on imports of dried and frozen eggs from foreign countries.

## Agricultural Council of Farm Organizations of Penna.

The annual meeting of the Agricultural Council of Farm Organizations, an association of practically all of the farm organizations of the State, was held in Harrisburg, Pa., on January 22nd. M. T. Phillips, Pomeroy, Pa., presided.

Following the reading of the minutes and the transaction of routine business a detailed statement of the various programs of the year was presented by Miles Horst, secretary.

Dean R. L. Watts, of Pennsylvania State College, made an address in which he presented the proposed agricultural program of the School of Agriculture during the next two years. He outlined the needs of the department in the way of new buildings as well as its financial needs.

Other problems such as Compensation Insurance for Farmers, Vocational School, Equitable Taxation, Rural Schools, Township Roads, etc., were briefly discussed and referred to various committees.

Secretary Jordan, of the State Department of Agriculture made a brief survey of the work of some of his departments and presented the Administration Program for a new building to house the Pennsylvania Farm Products Show.

### Proposed Building

A building 700 feet square is proposed, to be located within the city limits of Harrisburg, on ground already owned by the State. The new building would have a floor space of 49,000 square feet which could be used for exhibition purposes during the show. At other times of the year the building could be used for a variety of state purposes as well as for public and private demonstrations.

The cost of the building was estimated to be \$1,300,000 and an allowance of \$56,000 would be made under the appropriation for maintenance during the next bi-ennium.

This proposition has the full support of the Council.

Rural Electrification program was reported on by John M. McKee, secretary of the Joint Electrification Committee. He outlined the work that has been done and predicted a far greater use of electricity for farm purposes in the near future. During the year 2500 miles of lines had been built.

Officers elected to serve for the coming year were as follows:

President, H. D. Allebach, president of the Inter-State Milk Producers' Association, Philadelphia, Pa.

Vice President, John H. Light, secretary, Pennsylvania State Grange, Harrisburg Pa.

Secretary, Miles Horst, Field Editor, "The Pennsylvania Farmer," Harrisburg.

These three officers together with F. P. Willits, Ward, Del. Co., Pa., and C. J. Tyson of the Pennsylvania Horticultural Society, were elected to serve as the Executive Committee of the Council.

### Improve Dairy Herd

Dairymen must also be breeders of dairy cattle if the herd is to improve with the passing of the years. See that your calves are well born with an inheritance that makes possible their developing into better cows than their mothers, and then keep them growing all the time. This takes feed and care but gives big returns on the investment.

## Master Farmers Awarded Medals

(Continued from page 2)

Inter-State Milk Producers' Assn., is a member of the Grange, the Wycomb Cooperative Assn., the Guernsey Breeders' Assn. and the School Board.

Amandus Larson, Elk County, Pa. Fifteen years ago he purchased an old run down farm of 26 acres, borrowed some working capital and went to work, and has been successful. His dairy barn is equipped with milking machines, steel stanchions, drinking cups, litter carriers, electric lights, etc. Additional acreage has been added to the farm. His accredited Holstein herd is headed by an association sire. His cow testing association average shows an average production of 8500 pounds milk and 320 pounds butterfat.

S. G. Lehman, Erie County, Pa. Mr. Lehman was a county agent. He gave this up to start farming for himself. The farm he bought was an ideal place to put his teaching into practice. He is a poultry man of note, and a member of the 400 bushel potato club. He is active as a member of the County Horticultural Assn.

William G. Mendenhall, Chester Co., Pa. Forty acres of potatoes, averaging 400 bushels to the acre; sixty cows, each producing over 10,000 pounds of milk per year; mushroom sales running into five figures, are among the big things being done by Mr. Mendenhall. This farmer has proven himself as able in the marketing of his products as in their production. Mr. Mendenhall takes an active interest in the extension association, the schools and the church. He is a member of the Rotary Club and is a County Auditor.

Oliver A. Newton & Son, Sussex County, Delaware. The Newtons conduct one of the most highly organized private agricultural enterprises in this section. They have 125 acres in apples and peaches. Trap nested records are kept of several hundred White Leghorns. Minor products are berries, tomatoes, peppers, and other vegetables. The elder Newton began his agricultural career as a hired man on one of the farms he later bought. In 1910 he was elected president of the Delaware State Board of Agriculture. He received the honorary degree of Master of Agriculture from the University of Delaware.

Harrison S. Nolt, Lancaster Co., Pa. Through his stand in one of the local markets in the City of Lancaster, Mr. Nolt disposed of most of his leading crops, apples, etc., direct to the ultimate consumer. The quality idea of product is followed in the production of tobacco and of corn and wheat for seed. Mr. Nolt is a member of the Lancaster Co. Agricultural Extension Association, the Farm Bureau, is a bank director and a Rotarian.

Clarence H. Smith, Bucks County, Pa. Through the years when Mr. Smith worked the farm on shares and since he assumed full responsibility, it has been his task to modernize the farm, its production methods, its buildings and equipment. He has a registered, tuberculin and abortion tested Guernsey herd. One animal recently completed a State championship record in the G. G. G. class, producing 445 pounds of fat in 10 months on two milkings a day. The whole herd averaged 411 pounds fat and 7680 pounds of milk in 1927. Mr. Smith is also prominent as a breeder of Rhode Island Red chickens. Mr. Smith takes an active part in the local unit of the

C. B. Snyder, Lancaster Co., Pa. Apples grown by Mr. Snyder have a market from the Atlantic Ocean to the Rocky Mountains. He won 22 out of 35 prizes in apple contest at a recent State Farm Products Show. His apples are sold direct to the consumer. He has done some extensive work in Sure Crop Corn selection, and disease free berry plants. He never fails to qualify as a ton litter producer. His present livestock program includes the fattening of steers and the production of pure bred sheep and swine. Mr. Snyder is treasurer of the Pennsylvania Horticultural Association, an officer of the Extension Association and the Farm Bureau.

Clifford E. Snyder, Hunterdon County, N. J. Seed wheat, corn, potatoes, poultry and dairying are the sources of income from his 205 acre farm. Last year 13,000 chicks were brooded and reared. He has a herd of 15 Holstein cows and has recently remodeled his dairy barn and installed efficient dairy equipment.

Mr. Snyder is a graduate of Cornell University. He is president of the New Jersey State Board of Agriculture, a member of the Grange, the Horticultural Society, Potato Growers' Assn. and the Holstein-Friesian Association.

F. P. Willits & Son, Delaware County, Pa. Frank P. Willits and his son, Paul L. Willits have been members of a successful partnership since 1908. The enterprise was started when the elder Mr. Willits gave up a merchantile career and went \$10,000 into debt to purchase and equip his present farm. As a grower of mushrooms the Willits were pioneers in their section. Other products of the farm were milk, potatoes, peonies, and asparagus. Over 400 bushels of potatoes per acre were grown from a 15 acre patch this year.

For 15 years Frank P. Willits has been treasurer of the State Grange. Since 1916 he has been active in milk sales organization work. Mr. Willits was president of the Inter-State Milk Producers' Association from 1916 to 1921 and is today a member of the Board of Directors and of the Executive Committee of the Board, of that organization.

He was secretary of Agriculture for the Commonwealth of Pennsylvania, for four years under the Governorship of the Hon. Gifford Pinchot. For 10 years Mr. Willits has been treasurer of the National Cooperative Milk Producers' Federation, and is identified with many other farm organizations. He is also a director of the Grange National Bank of Downingtown, Pa., and of the Joint Stock Land Bank in Philadelphia. Paul L. Willits, is a director of the Cooperative Mushroom Growers' Association, he has been treasurer of the Township Board of Supervisors for five years and is prominently identified with many agricultural organizations.

Brief addresses were made by the recipients of the Gold Medals, after which the various Master Farmers present, who were honored last year were introduced. Mrs. Gertrude S. Stewart, Household Editor of the "Pennsylvania Farmer" then introduced the wives of the various Master Farmers of 1928, who were present.

No. 2  
OF A SERIES ON AMCO-FED HERDS

## DEPEND ON AMCO to SUPPLY THE PROTEIN

American Milling Company, Peoria, Ill.

Gentlemen:

I usually feed Amco 32% Supplement with home-grown grain, but this year did not have enough corn and oats, so am using Amco 20% Dairy. I am feeding about 2 bags a day and am getting over 600 lbs. of milk from my 17 cows.

Last year my herd led the Center County Cow Test Ass'n No. 2 with an average of

11,315 lbs. of Milk  
409.5 lbs. of Fat

During the summer I fed Amco 18% Dairy. I have been well satisfied with Amco feeds.

Sincerely,

J. Fred Slack

J. FRED SLACK balances his home-grown grain, and his home-grown roughage, with the Amco dairy ration which supplies the correct amount of protein. Usually, when grain crops do well on his farm he mixes them with Amco 32% Supplement—and last year his herd led their association!

When grain crops occasionally fail, Mr. Slack buys a complete dairy ration—Amco 20% Dairy. For some one Amco ration carrying either 18, 20, 24 or 32 per cent of protein will fit any unusual condition of crop or roughage. This year Mr. Slack is purchasing Amco 20% Dairy, and with 17 cows producing over 600 lbs. of milk per day, he feels that their production is again up to a high level.



DIVISION OFFICE  
MUNCY, PA.

Mr. J. Fred Slack, Centre Hall, Pa. whose herd last year was first in Center County Cow Testing Ass'n. No. 2.



Belle, grade Holstein, produced last year 11433 lbs. of milk and 469.3 lbs. of fat on Amco feed.



Buttercup 1022853, purebred Holstein, produced as a 2 year old 14,170 lbs. of milk and 490.8 lbs. of fat on Amco feed. She was high cow in Center County Ass'n No. 2

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Many of the large milk condensaries require that all milk delivered to them is strained through Dr. Clark's Purity Strainers because tests have proved that it is the *ONE* strainer that absolutely insures CLEAN MILK.

Dr. Clark's Purity Strainer is the most sanitary and easiest to clean strainer on the market. None other like it—none equal to it. It is made in two sizes—10 qt. and 18 qt. Sold by good dealers everywhere.

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ROOMS: Without Bath.....\$2.00  
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FINE DRY FULLY AVAILABLE  
HIGHEST QUALITY—LOW IN COST  
Brings best results at least cost per acre. The ideal lime for your farm. Write at once for prices delivered your station. Write at once for NATURAL LIME-MARL CO. ROANOKE, VA. (2 Plants at Charlec Town, W. Va.—B. & O. R. R.)

## Dairy Cattle at the Penna. Farm Products Show

Four breeds of dairy cattle were represented in Educational exhibits at the Pennsylvania Farm Products Show.

The Ayreshire breed was represented by four bull calves and fourteen heifers from herds of various members of the Pennsylvania Ayreshire Breeders' Association. An aged bull from the Masonic Home herd at Elizabethtown, was also shown.

Thirty-two Guernsey bulls from dams with records of from 400 to 800 pounds of butterfat were shown by leading members of the Eastern Guernsey Breeders' Association.

Holstein-Friesian, were represented at the show by an aged sire and six females. The bull was grand champion at the Lebanon County Fair. One of the cows was grand champion of four county fairs.

The Jersey breed was represented by five aged cows. The five cows had six silver and one gold medal to their credit. These cows were all of high productive capacity.

## Penna. Farm Products Show

(Continued from page 9)

Penna. State Poultry Association, Penna. State Baby Chick Association, Society of Farm Women of Pennsylvania, Penna. State Association of Markets, Penna. Threshermen and Farmers' Protective Association.

### Some of the Top Prizes

Martha Hess, Mechanicsburg, Cumberland County, received the grand champion prize for her Baby Beef exhibit. It sold later for \$578.10.

Alice Faust, Centre Hall, took the grand championship for lambs in the Lamb Class.

H. J. Walton & Son, Kennett Square, was the prize potato grower of the state. They grew 696 bushels of potatoes on a measured acre.

The title of dairy king, went to L. A. Zimmerman of Lehigh County. During the past four years his herd of 20 registered Holsteins produced per cow the average of 14,735 pounds of milk containing 489.6 pounds of butterfat.

## Penna. Ayrshire Herd Ranks High

During October, the eight Ayrshires owned by Barclay Farms, Rosemont, Pennsylvania ranked among the leading producers in the United States on their average production of 603 pounds of 4.24% milk, 25.53 pounds of butterfat, tested under the rules of the Ayrshire Herd Test, according to Advanced Registry Superintendent W. A. Kyle of the National Ayrshire Breeders' Association at Brandon, Vermont.

## Pennsylvania Association of Dairy and Milk Inspectors

The annual session of the Pennsylvania Association of Dairy and Milk Inspectors was held in Harrisburg, Pa., January 23rd and 24th, during the period of the Farm Products Show.

The meetings were presided over by W. F. Davidson, M.D., and addresses were made on many phases of the dairy industry. There was an outstanding attendance at all of the four sessions of the meeting.

Among the papers presented at the meeting were those by James W. Kellogg, Ph.D., Director-Chief Penna. Bureau of Foods and Chemistry, on "Regulating the Sale of Foods"; S. E. Bruner, V.M.D., in charge of Tuberculosis Eradication, Penna. Bureau of Animal Industry, on "Tuberculosis Eradication Work"; Louis A. Klein, V.D.M., University of Pennsylvania spoke on "Undulant Fever"; "Dairy Barn Ventilation" was the subject of an address by E. E. Griffin, Fairfield, Iowa; C. I. Cohee, Director Quality Control Department, made an address on "Improving the Quality of Milk Through Payment of Bonuses". H. B. Mitchell, V.M.D., Supervisor, Milk Inspection Bureau, Lancaster, Pa., made an address on "Eighteen Months of Lancaster's Milk Ordinance." Many other topics of particular interest in connection with the industry were discussed by various other speakers.

At the annual banquet which was held on Wednesday evening, Theodore B. Appel, M.D., Secretary of Health, Commonwealth of Pennsylvania and Robert S. Breed, Ph.D., New York State Agricultural Experiment Station were the outstanding speakers.

Officers of the association to serve for the coming year were: H. B. Mitchell, V.M.D., Lancaster, Pa., president; W. A. Snyder, V.M.D., Allentown, Pa., first vice-president; W. J. Lewis, Oil City, Pa., second vice-president and George C. Morris, secretary-treasurer, Harrisburg, Pa.

A farm inventory and a credit statement will tell where you stand in the farming business, and may help you get the loan you need to expand that business.

## Baby Chicks

If you want big, fluffy chicks from free-range, pure-bred flocks which have been inspected and culled by an expert in the poultry industry,

### Then Buy Eley Quality Chicks

Just drop us a card or give us a phone call, and our catalogue and price list will be mailed free.

### Remember We Guarantee Satisfaction

## Eley Baby Chick Hatchery

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## Keystone Potato Grower Sets New State Record

Growing 694.4 bushels of potatoes on a measured acre H. J. Walton and Sons, Chester County, have set a new Pennsylvania record for members of the famous Keystone 400-Bushel Potato Club. The new mark breaks the record made by Ray Briggs of Luzerne county, in 1926 when he grew 688 bushels.

The Penna. 400-Bushel Club was organized in 1922 to honor those growers who, through the use of modern scientific methods of potato culture, attain yields exceeding 400 bushels on a measured acre.

During the first year of the club A. Achenbach and Son, Northampton county, grew 478.5 bushels to lead the 14 successful growers. In 1923 there were 54 members, with J. S. Wile, of Montgomery county, the leader. His yield was 532.4 bushels. Ray Briggs took the leadership in 1924 and maintained it for three years, his successive yields being 637.6, 571.4, and 688 bushels. In 1924 there were 33 members, the next year 39, and in 1926, a total of 97 successful aspirants. In 1927 the number went up to 187, with a yield of 651.4 bushels grown by Amos S. Eberly, of Lancaster county, the best in the state.

More than 300 members of the club have been reported to date by county agents for 1928.

## Pennsylvania Federation of Holstein-Friesian Clubs

Allebach Elected President

The annual business meeting of the Pennsylvania Holstein-Friesian Clubs was held on January 24th, in Harrisburg, Pa., during the period of the Pennsylvania Farm Products Show.

The Federation transacted routine business. It elected the following officers to serve during the ensuing year, president, H. D. Allebach, Trappe, Pa.; vice president, J. G. Kerick, Towanda, Pa.; secretary-treasurer, H. E. Robertson, York, Pa.

The following general committees were named: Legislative Committee, T. S. Brown, H. E. Robinson and W. A. Woods; State Council Committee H. E. Robertson, Dr. L. M. Thompson, and I. V. Otto; Budget Committee Allen N. Crissey, H. E. Robertson and A. B. Craig; Show Committee, Ivo V. Otto, Hubert S. Miller and A. S. Deysher; Auditing Committee, George Jordan and Norman E. Rishel; Farm Products Show Committee, H. E. Robinson, I. V. Otto and Dr. L. M. Thompson.

## Conestoga Valley 4-H Holstein Calf Club

The Conestoga Valley 4-H Holstein Calf Club, located in eastern Lancaster county, Pa., met at the farm of H. K. Martin, Goodsville, Pa., on January 12th, for the distribution of 18 pure bred Holstein calves by its members. Ten of the calves were obtained in New Jersey while 8 came from outstanding pure bred herds in Lancaster County.

Distribution of the calves was made by J. F. Keim, assistant Penna. State Calf Club leader and H. S. Stout, assistant county agent of Lancaster county.

Among the members of the club who received calves were the following: Frank Stoltzfus, Emery Stoltzfus, Arline Brendle, Irma Brendle, Melvin Sander, Celestine Sander, Robert Shirk, John Shirk, Ruth Styer, Henry Styer, Charles Styer, Pearl, Abram, Eli and Mayme Martin, Clair Ely, Albert and Elsie Mitzler.

### Records Tell Dairy Story

Keeping milk production records of dairy cows is important. In no other way can the dairyman tell which cows are best and just how good or poor each one is. If weighing the milking each time is too much work, then the night and morning milk can be weighed one day a month and multiplied by the number of days in the month. Keep the records in a book and at the end of the year you will have some very valuable information of your herd.

The "E-Z" Shock Absorbing Seat Spring will make the farm machines, TRACTORS etc., ride EASY. It absorbs the Side-shocks that are so injurious to the Spine and nervous system. Fits any machine. Satisfaction guaranteed or money refunded. Hundreds of unsolicited testimonials from pleased users. Delivered by parcel post. Send for circular. Agents Wanted.



Old Chatham, N. Y.

### Win Apple Prizes

The Chester-Delaware County Fruit Growers' Association, received first prize for its County Association Apple exhibit; second prize went to the Bucks County Fruit Growers' Association and third prize to the Luzerne Horticultural Association at the Pennsylvania Farm Products Show.

Boxley Farm High Grade Guernseys  
Acad. Herd No. 100959.  
Abortion Free Herd No. 109.  
During January we sold several attractive heifer calves to farmers who are building up clean herds. We can furnish these heifers at reasonable prices.  
LYON SMITH - Buckingham, Pa.

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THE NAME TO GO BY—WHEN YOU GO TO BUY  
**PAINT AND VARNISHES**  
Write for color Cards and Booklet "Paint Pointers"  
EUGENE E. NICE COMPANY, Inc., PHILADELPHIA



## 100 Real Dairy Cows 100

For sale at all times. Tuberculin tested Holsteins, Guernseys and Jerseys. Real milk producers. Carload lots a specialty. Priced to sell.

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Clip and Groom Your Cows  
During Stable Months  
—It Means CLEANER  
and BETTER MILK  
Clipped and Groomed Cows are clean and comfortable and keep dirt out of the milk pail. Clipping and Grooming improve the health of your LIVE STOCK. GILLETTE PORTABLE ELECTRIC CLIPPING AND GROOMING MACHINES OPERATE ON THE LIGHT CIRCUIT furnished by any Electric Power Co. or on any make of Farm Lighting Plant. PRICE LIST ON REQUEST  
GILLETTE CLIPPING MACHINE CO.  
129 West 31st St., Dept. 14, New York, N.Y.  
40 Years Making Clipping and Grooming Machines Only

## FREE! to Calf Raisers

Cut Your Feed Costs  
You can sell your whole milk and still raise "Better Calves" by using dry skim milk and adding the "minimum milk method." 1 lb. of dry skim milk and water makes 1 gal. of skim milk which costs only one-half as much to feed as whole milk and on which your calves will thrive.  
Write today for Bulletin 301 which tells all about dry skim milk. Gives complete ration and tells how to raise better calves from birth to maturity. We will be glad to send you a 4-lb. sample if you will send 10c in stamps to cover postage and cost of packing. We will also tell you where to buy dry skim milk.  
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If you want Big, Strong, Fluffy Chicks at honest prices that will make you money, get some of our Superb Barred Rocks and Wonder Strain large stock, guaranteed delivery.  
Satterthwaite's Seed Store  
16 N. WARREN STREET  
TRENTON, N. J.  
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## Lime and Fertilizer SPREADER

That will do the best of work, made to attach to any farm cart or wagon \$15.00. Send for circular  
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## High Grade Dairy Cows

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We handle all kinds of cattle

Holsteins — Guernseys — Jerseys  
A Specialty

All cows tuberculin tested and sold subject to a 60 or 90 day retest and fully guaranteed in every respect.

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Rooms all outside and with bath. All beds equipped with box springs and Nachman inner hair spring mattresses.

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Single rooms.....\$9.00 3.50 4.00  
Double rooms.....4.50 5.00 6.00  
LUNCHEON .60 and .75  
DINNER \$1.00, \$1.15, \$1.50

## Great Sacrifice Sale While They Last

3 Year Old. Everblooming Tea Roses. 5 colors. For \$2.  
Bedding Hyacinth. Assorted 20 for \$1.  
Giant Crocus. Assorted 100 for \$1.  
Giant Darwin Tulips. Assorted 100 for \$1.50  
Japanese or German Iris. 25 for \$1.  
2 Year Old CUMPS. HARDY Mums. 132 for \$1.  
Mixture of Gladiolus. Rare and Ruffled. Top size. 100 for \$1.50 and 25 Maidens Blush FREE. With order of 200, 1000 of these \$12, 100 FREE.  
3 Year Old Privet or Barberries. 40 for \$1.00 or 100 for \$2.  
Send Me Dahlias \$1. Among them are Jean Stratton, Ide ver Warner, Mariposa, Amun Ra, Jersey Jewell, Jersey Beauty, Sunset Glow, Bashful Giant, Mother and others as good.  
All Post Paid.  
J. Z. STODDARD, MT. HOLLY, N. J.

## TIMOTHY AND CLOVER \$4.00 Per Bu.

BIG BARGAIN—Sample Free—SAVE MONEY  
Red Clover and Timothy mixed—Standard Grasses, unsurpassed for hay or pasture. Contains 10 to 15 per cent clover—ready to sow. Thoroughly reseeded, guaranteed and sold subject to your test and approval. A real Bargain. Samples Free of Clover, Alfalfa, Sweet Clover, Timothy, all Field Seeds and special low prices with catalog. American Field Seed Co., Dept., M. P. R., Chicago, Ill.

## BABY CHICKS

Order now for March, April and May delivery.  
Rhode Island Red Chicks, "15 per 100; Barred Rocks, "15 per 100; White Leghorns, "12 per 100. Good straight stock, guaranteed delivery.  
Satterthwaite's Seed Store  
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## Alfalfa Hay For Sale

Weights and grades guaranteed. Prompt shipment. Write for delivered prices.

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192 N. Clark St., Chicago, Ill.





The hospital's splendid purebred Holstein herd has shown a decided improvement in every respect since the De Laval Milker was first started at this farm.

## Noted Holsteins of Norristown State Hospital Herd Do Well with the De Laval Milker

ONE of the many great institutions in the State of Pennsylvania using the De Laval Milker is the Norristown State Hospital at Norristown. The 125 splendid Holsteins that comprise the milking herd at the hospital are milked regularly with the De Laval Milker, and according to the hospital dairy authorities a decided improvement has been observed in both yield and condition of the cows themselves.

Mr. R. L. Campman, manager of the dairy, says in part: "The De Laval Milker has assisted us in producing cleaner milk, our bacteria count having been reduced from 14,000 to around 9000 or 10,000. I further believe our cows are in better shape due to the fact that they are receiving proper treatment from this milker, where before we had great difficulty in securing capable hand milkers."

The De Laval Milker is practically the universal choice of authorities at state institutions. This is true because the better milking, economy and dependability of the milker are widely known and recognized. Its sanitary features are also responsible for a large share of its popularity for practically all of the milk produced in institution dairies is consumed by the inmates, many of

whom are below normal physically and mentally. Rich, clean milk is an important part of their diet and does much to restore them to health.

### Other Institutions in Pennsylvania Using the De Laval Milker

Some of the other institutions in the State of Pennsylvania in whose dairies the De Laval Milker is used are:

Pennsylvania State College, State College  
Danville State Hospital, Danville  
Mercer County Home, Mercer  
Warren County Home, Youngsville  
Lakeview Poor District, Clarks Summit  
Crawford County Home, Saegerstown  
Tioga County Home, Wellsboro  
National Farm School, Doylestown  
Tresslers Orphan Home, Loysville  
Seton Hill College, Greensburg  
Camp Devitt, Allenwood (Sanitarium)  
I. O. O. F. Home, Grove City

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# Milk Producers

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

Vol. IX

West Chester, Pa., and Philadelphia, Pa., March, 1929

No. 11

### Dairy Industry Changing to Meet New Conditions

The increase in urban population and increased per capita consumption of dairy products in recent years are producing marked changes in the nation's dairy industry, declared Tom G. Stitts, United States Department of Agriculture economist in an address at University of St. Paul, Minn., February 28.

The increase in urban population in the East, he said, has resulted in greater requirements for fluid milk. For a part of the year there is not enough milk available in this region to supply the needs of the large metropolitan markets for fluid milk and cream. The Middle West is making up the deficit in the East, South and Southeast.

As the Middle West ships increasing quantities of cream, Mr. Stitts declared, the manufacture of butter and cheese has tended to move into sections where dairying is less intensively developed. Northern Wisconsin, Minnesota and many sections of Iowa have modified their farm operations for increased milk production.

The increased demand for butter of the higher scoring grades is reported to be an important development affecting the Central Northwest and Middle West. The old-time butter dealer, also, is confronted with competition of chain stores and other large organizations which buy direct in the country. Many large concerns engaged in marketing milk, butter, cheese, evaporated milk and powder are now operating country plants for the assembling and manufacture of a complete list of dairy products.

"To meet the more exacting requirements of the cream trade," Mr. Stitts said, "creameries are significantly changing their method of operation and are receiving whole milk from farmers. This requires additional equipment for manufacturing skimmed milk. In some places, especially in Wisconsin, factories are being equipped to condense or evaporate milk and ship cream to the East whenever the market justifies or to sell milk and cream in Chicago and other near-by cities.

"This type of plant is similar to those which have been developed in the New York and Boston milk sheds. As the important urban centers of population have increased their requirements for milk, condenseries, cheese factories and creameries have been gradually developed into whole milk plants. With this change in the utilization of milk, old factories have been discarded and have been replaced by plants so equipped and located that milk can be diverted into more profitable uses when occasion arises.

"With the improvement of roads and the rapid transportation afforded by the automobile, the small plant is finding competition more keen. The trend is decidedly toward the larger country plant in the more intensive dairy sections. The shift in size of plants means that greater attention will be given to the manufacture of more than one commodity, and promises a considerable

(Continued on page 6)

## PRICE OF MILK ADVANCED

The price to be paid our members by co-operating buyers during March and April 1929, has been advanced one quarter of a cent per quart or approximately 11½ cents per hundred pounds.

This agreement was reached in conference held on February 14th, between the officers and executive committee of your association and the cooperating buyers.

The market has been temporarily tight and it was felt that with the higher costs of dairy feeds the slight advance in price would bring prices more nearly in line with production costs at this difficult season for economic milk production.

Any further price changes, at the expiration of the two months named, will depend upon market conditions and will be the subject of a further conference before May 1st, 1929.

### Stable Prices Necessary to Make Farming Profitable

Maintenance of a stable price rather than fluctuating high and low prices for farm products is needed to make farming profitable, declared A. W. McKay, United States Department of Agriculture economist, addressing the Cooperative Marketing School at Little Rock, Arkansas, February 12.

"If dairymen, for example," he said, "can produce market milk profitably at \$3 per 100 pounds, it is to their interest to sell at approximately that level, rather than to raise the price to, say, \$3.50 and bring into their market milk from outlying districts which may force prices down to less than cost of production.

"If a good average cotton grower in Arkansas can produce cotton profitably at 20 cents a pound, it is to his interest that that price be maintained. Thirty cent cotton will bring submarginal land and submarginal producers into competition with him, and in the ensuing readjustment his losses will probably outweigh the temporary gain.

"Any industry can be adjusted to operate profitably under a fairly stable price level, but no business can avoid more or less frequent losses if the price of the commodity it produces or handles is subject to violent fluctuations."

Mr. McKay described the price policies of various cooperative marketing organizations, and enumerated the following "essential factors" of modern co-operative marketing:

1. Studies of the price history of the commodity. Such studies should cover a period in the past sufficiently long and representative to be used as a basis for forecasting probable future price changes and trends.
2. Studies of current supply and demand conditions and determination of a price policy on the basis of the analysis of current conditions and the knowledge of the price history of the commodity.
3. The selection of markets, and market outlets.
4. The determination of the grades, styles and sizes of packages, etc., in which the product shall be put on the market. The policy adopted in this respect determines to some extent the market outlets which will be used. For example, a cooperative may be able to sell butter in tubs to a trade which would not handle one-pound prints.
5. The selection of storage facilities and transportation routes.
6. The determination of the kind and amount of advertising and other special merchandising practices which shall be used to stimulate the demand for the product.
7. The selection of marketing agencies and the determination of terms and conditions of sale.

Last year Keystone cow testing associations increased the value of the product per cows \$6.93 over the preceding year. This amounted to \$195,301.26 for all cows tested. Tests located 2497 unprofitable cows in the herds of members, who promptly sent the "boarders" to the butcher.



## Maryland Educational Feeding Program

The Extension Service of the University of Maryland in cooperation with milk producers in the Bay View Section, Cecil County held a very successful Feed School on February 12 and 13.

J. A. Conover, Dairy Extension specialist, spoke on the value of legume crops, especially alfalfa and soy beans, for milk production.

Some time was spent in working out rations using the roughages in comparison with low protein feeds like timothy hay and corn stover. Ten pounds of the legume roughages furnish about 1.2 pounds of protein a day while the same amount of the non-legume roughage furnishes approximately four tenths of a pound of protein daily. This means that the dairyman who raises legumes for hay can use greater amounts of home grown grains and thus lower his cost of production.

Feeds as related to the odor and flavor of milk was also taken up. One minute after a cow eats garlic it can be detected in the milk. If cows are pastured on garlic they must be taken off seven hours before milking and it is a good plan to feed hay during this period. Any fresh green feed will produce a flavor and odor in milk and the cows, when first turned on new pasture should be taken off at least five hours before milking.

Much of the trouble from off flavored milk would be prevented if more good roughage were grown and the cows fed a longer time in the spring and not turned out until the grass was six or eight inches high.

Mr. W. H. Oldenberg, crop specialist talked on the growing of legume crops, especially alfalfa and soy beans for hay, and sweet clover for pasture. Virginia and Wilson soy beans have proven best for this section. They will make finer hay if planted at the rate of 1 1/2 or 2 bushels to the acre. The seed should be inoculated and especially so if planted on ground that has never grown them before.

Alfalfa the prince of all hay crops for milk production can only be grown on land that is productive and that is sweet. Most land in Maryland requires lime to grow alfalfa successfully. The seed should come from Kansas, Nebraska or the northwest and should be inoculated.

Sweet clover makes the most pasture of any crop we have. It also requires a sweet soil and can be sown in the spring with wheat, using a harrow to put it in, or like alfalfa, it can be sown in August. It requires a firm seed bed and the land should be well packed before seeding.

Morning, afternoon and night meetings were held and were well attended.

Further meetings of a like character are to be held in Dorchester County on March 12th and 13th and in Worcester on March 11th.

## Early Pullets Are Best

A more satisfactory winter egg production will be obtained from early hatched, vigorous, and well-grown pullets that carry a surplus of flesh. Late hatched, slow-maturing pullets should be culled from the laying flock and only the well-grown birds of desirable type should be kept. The culling out of the late hatched pullets removes one of the most common sources of roup infection and may tend to prevent the disease from gaining a foothold in the flock.

## Farmers Told How to Cut Dairying Costs

Increased acreages of alfalfa and clover as a means of providing the dairy industry in Pennsylvania a cheaper source of protein than mill feeds and concentrates, were urged by W. H. Hosterman, hay marketing specialist, Bureau of Agricultural Economics, States Department of Agriculture, addressing the Pennsylvania Dairyman's Association at Harrisburg, Pa., January 23.

"The cost of a well-balanced ration for dairy cows," Mr. Hosterman said, "is usually lowered materially by the use of good quality legume hays. Both alfalfa and clover are more nutritious than grass hays such as timothy because they contain larger amounts of digestible protein and lime. Alfalfa has approximately 230 pounds of protein and 39 pounds of lime per ton; clover 178 pounds and 32 pounds of lime while timothy has only 66 pounds of protein and 5 pounds of lime.

"While it is not considered advisable to substitute legume hays entirely for concentrates in the rations, they should be used to a far greater extent than at present in most dairy communities to reduce the cost of the ration. There are many sections in Pennsylvania where large acreages of timothy are harvested and stored as the principal roughage for high producing dairy cows. In these areas, timothy is often allowed to stand until the seeds are ripe and the plants have turned brown, at which time it has very little feed value.

"Much of the land in Pennsylvania on which timothy is now grown may not be suitable in its present condition for the production of alfalfa or clover. Many of these soil areas, however, can be made suitable for the growth of alfalfa or clover by an investment in lime and phosphates, for the correction of soil deficiencies, that will bring profitable returns from these legume crops. Where conditions are favorable, alfalfa will give better results than clover because of its higher yield per acre, its higher nutritive value, and because the stands do not have to be renewed so often."

Mr. Hosterman declared that farm management methods essential to the production of high quality legume hays are: Establishing and maintaining a pure stand; keeping meadows free from weeds and trash; cutting the hay at the proper stage of maturity; preventing excessive weather damage; curing to preserve leafiness and color, and storing to prevent weathering or the development of unsoundness. Dairy men who purchase all or a portion of their hay supplies were urged to buy on Federal grade with the specification that "the shipper shall furnish a Federal certificate of complete inspection".

Better Sires Increase Dairy Herd Production

Good breeding improves the milk flow in dairy herds.

Records on 48 bull association sires show an increase of 25 per cent in milk production and 13 1/2 per cent in butterfat production of daughters over dams, according to S. J. Brownell, assistant dairy extension specialist of the Pennsylvania State College. All of the records were computed to maturity.

In the Tioga association 48 daughters of bull association sires revealed an increase in production of 43.7 per cent over their dams.

## Budgetary Control and Management Efficiency

By A. V. SWARTOUT

Efficient management of cooperatives is fundamental to continued successful operation. It is, of course, essential to all business, but probably is especially important in farmers' marketing organizations because of the peculiar psychology involved and the large number of individuals directly interested.

Low costs of operation, high sales prices and similar tests of satisfactory operation which are usually applied to business operations, are valuable only when it is possible to compare them with some standard or with the same items in other organizations operating under similar conditions and performing similar services. However, any attempt to apply such comparative tests as a means of determining how satisfactory the operations have been, and the point at which efforts towards improvement should be directed, is met with some almost unsurmountable difficulties. In the first place, there is very little information available in the form of comparable costs for similar organizations, and prices realized by competitors are not, naturally, given very great publicity. Further, the incidental services performed by cooperatives for their members are much more numerous than those performed by private organizations, even if the marketing services are fairly similar, which they usually are not. To compare the costs and results under such unlike conditions is of very little use. And yet, there is a need for comparison with some standard.

The answer to this need has been the application of scientific analysis to business operations, and the development of a method of checking up on current operations, which in most discussions has been termed "budgetary control."

One banker who has had a great deal of experience with it, probably more than any other in this country, recently made the statement that he had yet to see any business, and he believed there was none, which could not be brought out of its difficulties and into a better position through the use of budgetary control.

In brief, the following five points summarize what can be accomplished through budgetary control:

1. Budgeting substitutes definite facts and figures for guesswork, and intelligent planning for blindfold fumbling.
2. It employs cooperation; and it does more, it enforces cooperation, indeed, creates it.
3. It serves to materialize contemplated actions in such a way that the results of those actions become known before the actions themselves are set in motion.
4. It helps to restrain unwise expansion.
5. It provides a unified plan of operation—a financial working plan that, as every executive knows, is of the utmost value and importance to any enterprise.

## I. M. P. A. Members Award 1928 Master Farmers

Among the Master Farmers, awarded medals at the recent Pennsylvania Farm Products Show by the Pennsylvania Farmer, members of the Inter-State Milk Producers' Association were represented by Roy F. Brown, William G. Mendenhall, Frank P. Willits and Charles H. Smith.

## Home-Grown Legume Hays Basis of Economical Dairy Ration

For 2,000 years agriculturists have recognized the superior feeding value of legume hays, yet today, says J. R. Dawson, of the Bureau of Dairy Industry, United States Department of Agriculture, only 41 per cent of the hay grown in the United States is legume hay. Furthermore, he says, in the North Central and North Atlantic States, which contain 66 per cent of all the dairy cows in the country, the farmers grow two tons of non-legume hay to one of legume hay.

"If dairymen would grow and feed more protein in the form of legume hays, their feed bills would be reduced materially," says the author, who gives some interesting data comparing legume hays with timothy in yield of protein and other nutrients.

During 1927, according to figures in the bulletin, the average acre of alfalfa yielded 2.79 tons of hay per acre, clover 1.75 tons per acre, and timothy 1.43 tons per acre; the average acre of alfalfa produced almost 7 times as much digestible protein, more than twice as much total digestible nutrients, and 15 times as much lime as did timothy.

"In other words," says Dawson, 15 acres of timothy would have to be grown, harvested and fed to produce as much lime as 1 acre of alfalfa. It would require approximately 7 acres of timothy hay to produce as much crude digestible protein as 1 acre of alfalfa.

"When the price of alfalfa is around \$12 a ton it will furnish 100 pounds of digestible protein for \$5.65, whereas from timothy hay at \$11 a ton the same amount of protein costs \$18.85. Even when compared with the high-protein concentrates, such as linseed meal and cottonseed meal at \$47 to \$50 a ton, alfalfa compares favorably in cost of protein. The cost of the dairy ration may be reduced materially by supplying a portion of the protein with alfalfa hay or some other legume grown on the farm. The legume that can be most practically produced on a given farm is the one that should be given first consideration."

A copy of Farmers' bulletin, 1573F, "Legume Hay for Milk Production," which treats of this subject, may be obtained by writing to the United States Department of Agriculture, Washington, D. C.

## Make Calves Comfortable

Dairy calves should have warm, dry, well-bedded stalls, and they will grow more satisfactorily if each calf has a stall by itself. If this is not possible then each calf should be tied with rope or fastened in stanchion during feeding. Be sure they do not suffer from thirst which often occurs even when they have milk to drink.

## New Eastern Shore Cooling Station

A new milk cooling plant, operated by the Scott-Powell Dairies, Philadelphia, was opened at Snow Hill, Maryland, several months ago. The plant, which opened up with 17 cans of milk, has now attained an average of 80 cans of milk per day.

Farmers in this section are cooperating in the erection of milk houses and cooling tanks. The producers are showing keen interest in the new plant and are reported as being well pleased with the new established project.

# COOPERATIVE DAIRYING IN HOLLAND

As Seen by Robert W. Balderston

"You will not want to see the tourist show places in Holland. They are but a relic of the past. You will want to see the people who are doing things in this modern work-a-day world." Thus spoke one of the delegates from the Netherlands to the World's Dairy Congress when we questioned him as to what we ought to see in that busy little country.

So, when we landed in Amsterdam, we turned our backs on Marken and



A Dutch Farmstead

Volendam with their quaint costumes and ancient customs and took the train to Leuwarden. This train passed northward through the low flat countryside dotted with tile roofed villages and with cows and canals as the chief features of the landscape. In about an hour we came to the rail-end at a little town on the west side of the Zuyder Zee. Here the train halted opposite a clean little white, steamer that was firing up preparatory to ferrying us across that almost landlocked arm of the North Sea. Now, we are told, this sea is doomed to become another Dutch province with fields and fresh water lakes when, inside of twenty-five years, the great new dyke is completed across its northern end. Everyone ate a hearty supper while on the steamer. It was the thing to do. Not being able to understand the bill-of-fare very well we took the regular meal. It was the easiest way.

Transferring to train again, in another hour we were in Leuwarden, the chief business center of Friesland.

"If you are coming to Holland to see something of the dairy industry, you should come to Leuwarden and we will gladly arrange to have you shown around." This kind invitation had been given us in London by some new-found friends, Mr. Eriks and Mr. Hepkima. We had willingly accepted.

Mr. Eriks' son met us at the railroad station in the family Buick and took us to the hotel. In the gathering dusk we set out to see the town. There was a "Kirmis" in town they said, and we should see this feature of provincial European life. It was like a fireman's carnival, only with a strange language and strange money clinking into the coffers of the management, but the merry-go-round and the cheap candy and cheaper jewelry and "jim-cracks" looked just like "main street" at home, when we turn out to visit the "Fireman's Carnival" to help the town's chief enterprise and perhaps incidentally to show how foolish we can be, on occasion.

Next morning, we started out with Mr. Eriks, Jr., our efficient guide and interpreter to visit the weekly cattle market. This is held in a tree-dotted square in the heart of the town. The

market is under careful supervision. Every facility is afforded for convenient exchange of livestock, even to the row of hotels along the street nearby where the bargains are clinched over a glass of "schnapps". Horses, cows, pigs, sheep and goats are for sale, but the bulk of the business is in dairy cattle either in profit or ready for the butcher and in calves for veal raising. Sales are privately made unlike those we saw at a similar market in England where all transactions are publicly made by the auctioneer.

From the livestock mart, we went to the warehouses of the cooperative cheese export association now being doubled in size. Then we went to a typical local cheese factory. Finally, in the long northern evening, we saw the farms where the milk is produced. Between five and six in the evening the milk was coming in to the factory, two deliveries daily, to insure the milk being sweet and in good condition to make the highest grade of butter and cheese.

A typical Dutch farmstead we visited consisted of one large building situated in the midst of green fields of grass, each separated from the others by drainage ditches instead of fences. The farm building had a high gabled roof so as to provide ample storage space for hay. The cows in winter were stabled along one side, facing the outside wall and with manure gutters so wide and deep that temporary bridges must be put over them when the cows are taken in and out. The family lived in very comfortable across one end. The other end was the stable of the horses and other farm



Interior of a typical Friesian Cowstable. K. N. Kuperus & Sons, Breeders and Exporters of Friesian Herdbook Cattle, Marssum, Friesland (Holland)

animals and the wagons were housed on the side opposite the cows. Everything was spick and span, as we had been led to expect. The lace curtains were at the cows' stable windows. The joists over the cows were scored until they were white like the kitchen table. Old-fashioned flowers were blooming in beds along the gravelled walks. The proprietor, Mr. Kuperus, was away when we arrived, but soon drove in the drive in his auto and helped the good wife to show us around. We compared notes as to economic conditions in our two countries. He told about his expenses—for American oil cake and cotton-seed meal—for labor and for rent. We could but be impressed by the efficiency of the intelligent type of farm management that he and his neighbors displayed.

Farming in Friesland in The Netherlands means dairying, and dairying in that country means the production of milk from native grasses and roots and imported grain feeds. The milk is manufactured into butter and cheese in cooperative factories to be sold on the mar-

kets of the world, in competition with the butter and cheese of Switzerland, Denmark, Canada, Australia, New Zealand and other exporting nations. So, hats off to the dairy farmers of Friesland!

The little town of Leuwarden in the centre of the country was formerly on the coast of the Zuyder Zee. The older inhabitants remember when the picturesque light house was a welcome beacon for the returning fishing fleet and coast-wise vessels. Now it stands twelve miles inland as a reminder of the centuries-long struggle by which the brave people of Holland have wrested their country from the sea. Behind the dykes of hard



Loading Cheeses

packed clay there must be continuous all winter pumping to rid the land of the surplus water from rain and river flow. Formerly this was done by the characteristic Dutch windmills, but now electric and gasoline power is rapidly supplanting the wind as being more dependable and more flexible. Farm fields are divided by shallow ditches. These lead to larger drainage canals. From the latter the water is pumped into the big commercial canals that connect countryside and town and lead the water off to the sea. The farms are practically all in permanent grass for summer pasture and for winter hay. The pasture season is somewhat longer than in Pennsylvania, perhaps about as long as it is on the "Eastern Shore" of Maryland. During the long cool summer the cows remain in the fields continuously. Without flies to annoy and hot midday sun to sap the energy, the cows need but little care from May till October other than the twice a day milking by the roadside gate. Enough of the meadows are mown for hay to give a full supply for the winter months. Little grain is fed on lush pastures but in drought and in the stabling season, American by-product grain feeds are used to keep up a profitable milk flow.

But very few farmers own their farms.



Refrigerator Car Carrying Title of Association

Large holdings belong to institutions and other corporate interests. For the use of this land the farmer must pay about \$25 per acre annual rental. As we rode all one day among these farms we kept

wondering more and more how their operators could make ends meet with such high rentals and the necessity of importing practically all grain. We were more amazed when we realized that the bulk of the dairy products are exported and sold on world competition. The answer to our question was a two-fold one, high-producing cows well cared for, and high quality products, well sold.

Some of the most prepotent Holstein-Friesian strains in American herds carry the blood of animals imported from around Leuwarden. Mr. Kuperus' father, for instance, exported the animals that started the well-known Mercedes family in America. Everywhere was evidence that in the development of its dairy cattle Holland is keeping pace with its competitor nations.

Dairy Record work is an important correlated activity of local "coop" cheese and butter factories, and these show greater and greater production and lower and lower costs from year to year. They are undoubtedly responsible in large measure for the success of the intelligent and industrious dairymen of Friesland. Their butter and cheese marketing methods are described by Mr. K. Eriks, director of their "Coop." Cheese Export Association in another article on page 7.

## Tuberculosis-Free Areas Successfully Maintained

The record of nine counties in Wisconsin which were freed of bovine tuberculosis three years ago is cited by the United States Department of Agriculture as evidence that large areas can be kept practically free of the disease.

When the cattle in these counties were first tested the average degree of infection was about 1 per cent. The removal of reactors and also subsequent testing reduced the degree of infection to less than one-half of 1 per cent and made possible the official recognition of the nine counties as "modified-accredited area," for a period of three years.

During the last few months testing of approximately 118,000 cattle in these nine counties showed the average degree of infection to be only about one-tenth of 1 per cent, and the area was re-accredited for another 3-year period.

The results of this extensive retest, officials of the Bureau of Animal Industry declare, show conclusively that large areas containing large numbers of cattle can be maintained comparatively free from bovine tuberculosis. The counties are in a group, with one exception, which is an advantage to all cattle owners in the area, as it is unnecessary to have so many quarantine restrictions. The greatest asset resulting from the work, however, is the fact that the disease has been practically eradicated from the area, thus eliminating economic losses from that source and also danger to the public.

## Keep Seeds Dry

After the seed order arrives it is important to keep the seed in a dry place, where an even temperature is maintained. Seeds will lose their germinating power and vitality very rapidly in a damp place where the temperature fluctuates. Dryness is more important than temperature, say State College vegetable specialists.



## INTER-STATE MILK PRODUCERS' REVIEW

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As may be noted in the columns of this issue of the "Milk Producers' Review," our members will have the advantage of an approximate increase of 11½ cents per hundred pounds in the price obtained for their milk during the months of March and April, 1929.

The value of the Philadelphia Selling Plan as a means of adjusting prices and conditions to meet the demands of the market is again illustrated. With the advantage of having statistical facts at hand and being thus informed as to the actual condition of the market your association can, much more readily than heretofore, bargain to much better advantage with our buyers.

Our ability to reflect these conditions and to use them to the advantage of our producers at varying stages of the market, based upon an accurate knowledge of supply and demand, and adjusting conditions to meet such situations as they arise is the goal to which the officers of your association have directed their efforts for some time.

Tariff revision is in progress by our National Congress. The Ways and Means Committee of the United States House of Representatives has been conducting public hearings since early in January, preparatory to making changes in the duties and classifications of imported products.

While the hearings have covered all kinds of products, the Committee believed, at the time the hearings were announced, that revision could be limited principally to the schedules covering Agricultural Commodities. During recent years, imports of certain farm products have been increasing rapidly. Many representatives of farm organizations appeared before the committee to present facts with respect to this growing competition and to suggest rates of duty needed to afford adequate protection to our farmers.

The National Cooperative Milk Producers' Federation of which the Inter-State Milk Producers' Association is one of the larger members, asked higher duties on all dairy products. A rate of 15 cents per pound was requested on butter and proportionate rates on other dairy products.

The National Milk Producers' Federation through an alliance with the Live Stock Cooperatives of the Middle West, the Cotton Cooperatives of the South, the Farm Bureau Federation, the National Grange, Cotton Crushers' Association, etc., several American Fisheries

Associations, and many other farm organizations sponsored a uniform 45% ad valorem duty against all vegetable animal and marine fats, oils, greases and related oil bearing materials. Competition in this field has been growing by leaps and bounds and many of these various oil materials are now on the free list. These imported oil commodities compete with American Butter, Lard, and Cottonseed Oil. In recent years, Oleomargarine particularly, has become almost exclusively a foreign product—the principal ingredient today being coconut oil from the Philippine Islands.

Tariff rates effect the farmer from many angles. The developments of the present tariff revision should bear your close observations.

## Two Million Farmers Are Cooperating

Two million farmers are organized into 12,000 associations in the United States for the purpose of marketing their products or buying their supplies, or doing both, on a cooperative basis. Last year they sold collectively farm products to the value of nearly two billion dollars and they purchased farm supplies to the value of nearly a half billion dollars.

These cooperatively minded farmers are scattered throughout the 48 states, however, they are numerous in Minnesota, Iowa, Wisconsin, Missouri, Pennsylvania, New York, and in the states along the Pacific Coast.

Nearly one-third of the farmers engaged in buying or selling together are members of farmers' elevator associations, and about one-fifth belong to cooperative creameries, cheese factories, or milk-marketing associations. Nearly 150,000 are interested in the cooperative ginning or marketing of cotton. About 50,000 farmers are selling poultry products cooperatively, and about 25,000 are acting collectively in marketing their annual wool clips.

Nearly one-half of the farmers participating in cooperative activity are members of more than one organization.

## Sires Set New State Improvement Record

Remarkable improvement in butterfat production has occurred in the Wayne county bull association, S. J. Brownell, dairy extension specialist of the Pennsylvania State College, declares. Two sires in the group lead all associations in the state in the number of daughters having higher cow testing association records than their mothers.

The first sire used has 24 daughters in cow association work which averaged 441 pounds of butterfat in a year, a 9.3 per cent increase over the production of their mothers. The second sire was used in the breeding program involving the daughters of the other bull. Nineteen of his daughters have an average production of 459 pounds of butterfat per year, which is an increase of 7.1 per cent over the production of their mothers. Brownell states that this is an unusual improvement, considering the high production of the first cows.

Bull association work calls for the exchange of sires from group to group until they have been used by all groups. Through the supplementary work of the cow testing associations the value of the bulls in improving production is determined. Without such records good bulls are often sold to the butcher; with the records the proved sires are available for further good service.

Associations, and many other farm organizations sponsored a uniform 45% ad valorem duty against all vegetable animal and marine fats, oils, greases and related oil bearing materials. Competition in this field has been growing by leaps and bounds and many of these various oil materials are now on the free list. These imported oil commodities compete with American Butter, Lard, and Cottonseed Oil. In recent years, Oleomargarine particularly, has become almost exclusively a foreign product—the principal ingredient today being coconut oil from the Philippine Islands.

Tariff rates effect the farmer from many angles. The developments of the present tariff revision should bear your close observations.

# Market Conditions

H. D. ALLEBACH

The price to be paid producers for fluid milk during March and April, 1929, has been advanced approximately 11½ cents per one hundred pounds.

This was the result of a conference between our officers and executive committee and the cooperating buyers in the Philadelphia Milk Shed, held in our offices on February 14th.

The increase in price was requested by the producers in view of the increased cost of dairy feeds, particularly during the past few months and further that it is more difficult and expensive to produce milk during these two months than in any other month of the year. In addition it was pointed out that home-grown roughage was extremely scarce in many sections and conditions on the whole were such as would result in a decreased production and this in the face of a growing consumer demand.

The present price increase has been agreed upon for the month of March and April only and unless market conditions change, the price which has heretofore prevailed for basic milk, will again apply. In other words the present price arrangement is but a temporary one and subject to readjustment as of May 1st, 1929.

## "A" Milk Prices

Notwithstanding the fact that the new definitions for "A" milk, published in the "Milk Producers' Review" and that many additional copies have been sent to those who have requested them, there are still some producers who have failed to fully comprehend the program.

We again ask you to carefully read the definitions for "A" milk, published in the January issue of the "Milk Producers' Review", where they are clearly and consistently stated. These definitions are fair to every producer. If they are observed, a producer can, at all times, be assured of a premium of 25 cents a hundred pounds, provided the bacteria count is satisfactory. If the producer keeps his bacteria count low during the summer, that is three months during the six, one of these months being July or August, he will be entitled to a 40 cent per hundred pound premium, at all times, provided his bacteria count is below 10,000.

## Supply and Demand

The supply of fluid milk during the month of February has been on the average just about normal. In some markets there has been even more than an adequate supply, while in others a slight shortage in production is to be noted. Under the circumstances no actual surplus in the supply is reported although we do find that while some smaller dealers are suffering from a surplus others have had a normal supply.

Prices for surplus milk during February were at a slightly higher price as compared to that of the previous month.

## Market Your Crops Through Your Cows

Cows are markets for farm crops. You set the price you get for your crops, for the price depends upon the quality of your cows and the proper balancing of their feed. Balance your home-grown feeds with purchased protein in cottonseed or oil meals if you want highest possible prices for hay, silage, and grain crops.

## February Butter Market

Milk shipped during February will be paid for, by cooperating dealers, under the provisions of the Philadelphia Selling Plan.

Grade B market milk three per cent butter fat content (basic quantity average) delivered f. o. b. Philadelphia during February, is quoted at \$3.29 per hundred pounds.

The price of grade B market milk, basic quantity average, three per cent butter fat content, delivered at Receiving Stations in the 51-60 mile zone, during February is quoted at \$2.71 per hundred pounds. The usual butter fat differentials applying in other mileage zones in the territory are quoted on page 5 of this issue of the "Milk Producers' Review."

The price of Class I surplus milk for February, three per cent butter fat content, delivered f. o. b. Philadelphia is \$2.54 per hundred pounds or 5.45 cents per quart. The price of Class I milk three per cent butter fat content at all Receiving Stations is \$1.96 per hundred pounds.

The price of Class II surplus, 3 per cent butter fat content, f. o. b. Philadelphia delivery is \$2.14 per hundred pounds or 4.6 cents per quart. The price of this class and grade of milk delivered at all Receiving Stations is \$1.56 per hundred pounds.

## February Butter Prices

Throughout the month there has been a firmer tone to the market and there have been no sharp fluctuations, either up or down. In fact the widest range in prices was not over one cent and the movement was almost entirely on a fractional basis. The high of the month, for 92 score butter, solid pack New York City was 52½ cents, while the low was 49½ cents.

Creamery butter holdings in cold storage, as reported by the Bureau of Agricultural Economics, on February 1st, (available February 13th) was 24,750,000 pounds as compared to 28,273,000 pounds one year ago and 29,520,000 the five year average. This shows a shortage of 3,523,000 pounds on February first as compared with 2,506,000 pounds on January first, indicating a fairly satisfactory movement from storage during January.

There has been no pronounced movement of butter from abroad. Some moderate shipments have been made on optional bill of lading but the amount going into warehouses has been relatively small.

The average price of 92 score butter, solid pack, New York City on which the surplus price for February was computed was 4776 cents, as compared to 4776 cents one month ago and 4632 the price quoted for February, 1928.

## MONTHLY SURPLUS PRICES

	4% at all Receiving Stations	
	Class I	Class II
1928		
January	2.43	1.27
February	2.21	1.85
March	2.35	1.96
April	2.17	1.80
May	2.13	1.77
June	2.09	1.73
July	2.12	—
August	2.20	—
September	2.26	—
October	—	—
November	—	—
December	—	—
1929		
January	2.26	1.88
February	2.34	1.66

# LATEST MARKET PRICES

The basic price, quoted below for February, 1929, is to be paid by co-operating dealers on the average basic quantity established by each producer. For all milk bought in excess of the basic amount, the surplus price, quoted below for the month of February, 1929, are to be paid.

Surplus milk will be paid for under two classifications. Class I, represented by the amount of milk in excess of the basic average and equal to it in amount, which will be paid for by co-operating dealers on the basis of 92 score butter, solid pack, New York City, plus 20 per cent and Class II surplus represented by milk shipped in excess of the first surplus amount, which will be paid for on a flat average 92 score butter for the month.

The following quotations are based on 3 per cent butterfat content milk and a differential of 4 cents for each tenth point and 2 cents for each half tenth point, up or down, and are for all railroad points. (Inland stations carry differentials subject to local arrangements.)

## PHILADELPHIA SELLING PLAN INTER-STATE MILK PRODUCERS' ASSOCIATION PRICES

This price list is issued with the understanding that it is not to the producers and that all buyers using it as a basis of payment to producers, shall in addition thereto make the following contributions and payments:

(1) To the Philadelphia Inter-State Dairy Council 2c per 100 pounds (46½ quarts) of all milk purchased from any producer at prices listed hereon.

(2) To the Inter-State Milk Producers' Association 2c per 100 pounds (46½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2c per 100 pounds (46½ quarts) of all milk bought from other producers at prices listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed, for improvements and stabilization of markets and for an educational campaign advertising the food value of dairy products.

BASIC PRICE F. O. B. Philadelphia Grade B Market Milk		BASIC PRICE Country Receiving Stations	
Test Per Cent	Per 100 lbs.	Per Qt.	Quotations are at railroad points. Inland stations carry differentials subject to local arrangements.
3.05	3.29	7.1	Prices are less freight and receiving station charges.
3.1	3.31	7.15	
3.15	3.33	7.2	
3.2	3.35	7.25	
3.25	3.37	7.3	
3.3	3.39	7.35	
3.35	3.41	7.4	
3.4	3.43	7.45	
3.45	3.45	7.5	
3.5	3.47	7.55	
3.55	3.49	7.6	
3.6	3.51	7.65	
3.65	3.53	7.7	
3.7	3.55	7.75	
3.75	3.57	7.8	
3.8	3.59	7.85	
3.85	3.61	7.9	
3.9	3.63	7.95	
3.95	3.65	8	
4	3.67	8.05	
4.05	3.69	8.1	
4.1	3.71	8.15	
4.15	3.73	8.2	
4.2	3.75	8.25	
4.25	3.77	8.3	
4.3	3.79	8.35	
4.35	3.81	8.4	
4.4	3.83	8.45	
4.45	3.85	8.5	
4.5	3.87	8.55	
4.55	3.89	8.6	
4.6	3.91	8.65	
4.65	3.93	8.7	
4.7	3.95	8.75	
4.75	3.97	8.8	
4.8	3.99	8.85	
4.85	4.01	8.9	
4.9	4.03	8.95	
4.95	4.05	9	
5	4.07	9.05	
5.05	4.09	9.1	
5.1	4.11	9.15	

When milk is not tested the price f. o. b. Philadelphia is 8 cents per quart.

FEBRUARY SURPLUS PRICES F. O. B. Philadelphia		FEBRUARY BUTTER PRICES 92 Score, Solid Pack	
Test Per Cent	Per 100 lbs.	Philadelphia	New York
3.05	\$1.96	50½	50
3.1	2.00	50½	49
3.15	2.02	50½	49
3.2	2.04	50½	49
3.25	2.06	50½	49
3.3	2.08	50½	49
3.35	2.10	50½	49
3.4	2.12	50½	49
3.45	2.14	50½	49
3.5	2.16	50½	49
3.55	2.18	50½	49
3.6	2.20	50½	49
3.65	2.22	50½	49
3.7	2.24	50½	49
3.75	2.26	50½	49
3.8	2.28	50½	49
3.85	2.30	50½	49
3.9	2.32	50½	49
3.95	2.34	50½	49
4	2.36	50½	49
4.05	2.38	50½	49
4.1	2.40	50½	49
4.15	2.42	50½	49
4.2	2.44	50½	49
4.25	2.46	50½	49
4.3	2.48	50½	49
4.35	2.50	50½	49
4.4	2.52	50½	49
4.45	2.54	50½	49
4.5	2.56	50½	49
4.55	2.58	50½	49
4.6	2.60	50½	49
4.65	2.62	50½	49
4.7	2.64	50½	49
4.75	2.66	50½	49
4.8	2.68	50½	49
4.85	2.70	50½	49
4.9	2.72	50½	49
4.95	2.74	50½	49
5	2.76	50½	49

MONTHLY BASIC PRICE OF GRADE B OR MARKET MILK		MONTHLY BUTTER PRICES	
	3 per cent butter fat content		Chicago
	F.O.B. Phila. station 50 mile	Receiving zone per cwt.	
1928			
January	3.29	2.71	50½
February	3.29	2.71	50½
March	3.29	2.71	50½
April	3.29	2.71	50½
May	3.29	2.71	50½
June	3.29	2.71	50½
July	3.29	2.71	50½
August	3.29	2.71	50½
September	3.29	2.71	50½
October	3.29	2.71	50½
November	3.29	2.71	50½
December	3.29	2.71	50½
1929			
January	3.29	2.71	50½
February	3.29	2.71	50½

## MARCH MILK PRICES Inter-State Milk Producers' Association, Inc.

In accordance with an agreement reached with co-operating buyers, the price to be paid for basic milk shipped during March and April, 1929, has been advanced one-quarter cent per quart or approximately 11½ cents per hundred pounds, at delivery points.

Milk shipped to co-operating dealers will, as heretofore, be paid for on the basic and surplus plan.

## "A" Milk Prices

to be paid by

## Cooperating Dealers

For milk delivered in

February, 1929

will be found in detail on

pages 9, 10, 11 and 12

in this issue of the

Milk Producers' Review

KEEP THIS COPY

FOR FUTURE

REFERENCE

## Inter-State Milk Producers' Association

Incorporated  
Flint Building, 219 N. Broad St.,  
Philadelphia, Pa.

Representing over 21,000 Dairy Farmers  
in the Philadelphia Milk Shed.

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Frederick Shangle, Vice President  
R. W. Balderton, Secretary  
I. R. Zellers, Asst. Secretary  
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F. M. Twining, Asst. Treasurer

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## Eastern States Farmers' Exchange

## DO YOU BUY SEEDS OR CROPS?

The value of seed is not determined by its cost per pound but by the crop it produces. For instance, suppose the right seed corn for your conditions costs \$4 a bushel. That bushel should provide seed for at least four acres so that it costs per acre only \$1. Suppose the wrong seed for your conditions costs only \$2 a bushel. A quarter of that \$2, or 50c, is the seed cost per acre. With silage worth \$4 a ton to feed, the right seed need produce only a quarter of a ton more silage to the acre than the wrong seed to show the same return over the cost of seed. Actually it frequently returns 20 times a quarter of a ton more silage per acre—20 times more digestible nutrients. Twenty times a quarter of a ton is only 5 tons after all.

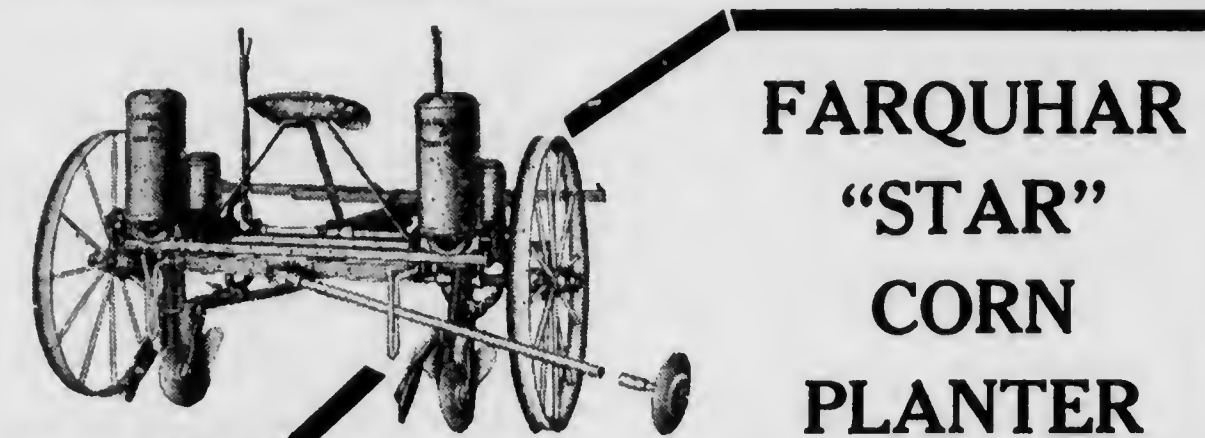
What applies to seed for silage corn applies to other seed as well. The cost of seed is only a trifling part of the value of a good harvest, and a poor harvest is likely to result from inferior or unadapted seed.

Realizing that seed values are not to be determined by the cost of seed offerings, but can only be discovered by painstaking selection, members of the Eastern States Farmers' Exchange have developed a seed-selecting service through which they make their field seed purchases. The seed department of this farmer-owned, cooperative buying organization determines carefully what the field seed needs of its members are, and then goes to whatever lengths prove to be necessary to assure members seed to fit these needs.

That this service is satisfactory to the farmers who have taken advantage of it is shown by the fact that three times as much seed was distributed by the Eastern States Farmers' Exchange in 1928 as in 1927, and that seed orders for 1929 already placed with the Exchange substantially exceed the total seed actually distributed in 1927.

A booklet describing the Eastern States seed service is just off the press and has been mailed to all members. A copy will be sent to you if you so request. You will find it a valuable addition to your farm library for it contains in understandable form facts you should have at your command.





## FARQUHAR "STAR" CORN PLANTER

Puts the kernels of corn where you want the stalks to grow—on level ground or steep hillsides. Each row has separate adjustment as to depth of planting. Adjustable as to width between the rows.

Well adapted to all kinds of soil and very accurate on steep hillsides; for all kinds of grain—corn, beans, peas, beets.

Built with and without fertilizer sower. Double Discs, Runner or Shovel Openers and Disc or Scraper covers. You can plant your corn exactly as you wish with a Star Two Row Planter—a positive drop and at any reasonable depth with light or medium covering.

## NEW FARQUHAR LOW-DOWN DOUBLE RUN FEED



## INTERCHANGEABLE DRILL

This new drill has but one type of drag bar. May be equipped with pins or springs; shovel openers or discs and the changing from shovel to disc openers or vice versa requires but 20 minutes. Both shovel and disc drills may be staggered by raising one lever.

Low-Down hoppers and standard 48-inch wheels; Double Run Grain Feed; Star Wheel forced fertilizer feed; accurately regulated grass seeder; also well adapted for spring cultivating of wheat and seeding clover and alfalfa. Seed may be broadcasted or sown through tubes and boots. Has wide range of feed for grain, peas, beans and fertilizer.



These three implements are very popular because of their proven value—Write to-day for complete description.

Built in Sections for Team or Tractor

Threshers  
Hay Balers  
Engines  
Boilers  
Cider Presses  
Dairy Boilers  
Sawmills  
Traction Engines  
Manure Spreaders

## FARQUHAR

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Grain Drills  
Corn Planters  
Harrow-Planters  
Shovel Plows  
Cultivators  
Weeders  
Corn Shellers  
Potato Diggers

### Dairy Industry Changing to Meet New Conditions

(Continued from page 1)

change in the operation and management of the country organizations.

"The increase in the number of whole milk creameries has been a factor in increasing the supply of skim-milk powder. The country creamery is giving more attention to the disposition of by-products with increase in size. During the last five years, the dried powder production in the United States has increased over 175 per cent, which has necessitated very rapid development in new uses for milk powder and increased uses in channels where formerly only small quantities had been used, as in ice cream, candy, bakery products, and milk drinks."

Scott Powell Dairies  
Abandon Some Country Plants  
Scott Powell Dairies, with headquarters in Philadelphia has discontinued its receiving stations at Vintage, Intercourse, Atglen, Leola and East Earl. A large share of this milk, which is from tuberculin tested cows is now being shipped direct to Philadelphia.

This direct shipped milk nets the producer about 20 cents per hundred pounds more than at the receiving station because it does not carry the reduction for plant operation.

The remaining untested milk at the above receiving stations has been transferred to plants at Georgetown, Gap, New Holland and Honeybrook, it is understood, at no additional cost for transportation to the producer.

### National Convention Holstein-Friesian Clubs to be Held in Philadelphia

A general committee consisting of representatives of the Pennsylvania, New Jersey and Delaware State Holstein Friesian Clubs, met in Philadelphia, Pa., on March 1st, to consider plans for the entertainment of the National Convention of the Holstein-Friesian Clubs of America, to be held in that city on June 6th, 7th, 8th and 9th, 1929.

The headquarters will be at the Benjamin Franklin Hotel.

The first two days of the convention will be given to general business and educational programs. The last two days of the meeting will be given to the National Holstein-Friesian Cattle Sales.

The following general committee have been named by H. D. Allebach, president of the Pennsylvania Federation of Holstein-Friesian Clubs.

**General Committee—**  
H. E. Robertson, York, Pa.  
Eugene Stapler, Yardley, Pa.  
G. D. Brill, Jamesburg, N. J.  
Wm. Whittingham, Glencoe, Md.  
Richard McMullen, Wilmington, Del.

**Ways and Means Committee—**  
H. D. Allebach, Philadelphia, Pa.  
John M. Dennis, Baltimore, Md.  
Martin J. Sheridan, Lebanon, N. J.  
J. Howard Schabinger, Felton, Del.

**Reception Committee for Women—**  
Mrs. Robert F. Brinton, West Chester, Pa.

Mrs. H. E. Robertson, York, Pa.

**Reception Committee for Men—**  
Dr. J. M. Thompson, Montrose, Pa.  
Frank Keen, West Chester, Pa.

**Entertainment and Banquet—**  
Robert F. Brinton, West Chester, Pa.  
Ivo V. Otto, Carlisle, Pa.  
Mr. Kelly, Walkersville, Md.  
Eli D. Van Meter, Bridgeton, N. J.  
J. R. Danks, Winterthur, Del.

**Convention Publicity and Attendance—**  
A. N. Crissey, Salem, N. J.  
W. C. Devine, Philadelphia, Pa.  
A. A. Miller, Philadelphia, Pa.

In addition to the above committee, James A. Reynolds, treasurer of the National Association and chairman of its executive committee, and Holten Semerics, National Secretary, attended the meeting and took part in the deliberations.

While plans are not completed, tentative programs include a visit to Winterthur Farms, Wilmington, Del., and to the Longwood Gardens of Mr. Pierre du Pont. This trip will include a steam boat trip on the Delaware River, from Philadelphia to Wilmington, Del.

The annual banquet of the National Association will be held at the Benjamin Franklin Hotel, on Wednesday, June 7th. H. E. Robertson was elected treasurer of the general committee.

The work of the various committees was discussed and outlined. Local committees in the various sections of the several states are being planned and will be kept advised as to the general program so that a wide distribution of publicity pertaining to the National Convention will be available.

Every effort will be made to have this coming convention the most successful that the association has ever held.

Uncle Ab says if it weren't for de-tours a lot of nice country would remain unseen.

### Vocational School Boys Win Medals

James Nelan, Trinity High School, Washington County, Penna., won the gold medal presented by the Inter-State Milk Producers' Association, at the time of the Pennsylvania Farm Products Show in January, for having the best dairy project in the Pennsylvania State Vocational School contest. James Nelan's project consisted in the care and management of five pure bred Guernsey cows. The award was made on the basis of profit on the herd of five cows above feed and other costs.

His brother, John Nelan won the gold medal in the so-called "winners' class" with a project of seven purebred cows.



John and James Nelan

The Trinity High School was also presented this year with a framed picture as a prize for having rated second among the eighty-four contesting vocational high schools of the State, the youngest school to have received this honor. The work in vocational agriculture was organized at Trinity three years ago.

As an interesting sidelight, when R. W. Balderston, Secretary of the Inter-State Milk Producers' Association, came forward to make the presentation, he found that the Supervisor of Agriculture at Trinity High School, Thomas C. Y. Ford, had been the Tester of Avondale-West Grove Cow Testing Association eight years ago and in this capacity had regularly visited Mr. Balderston's farm and tested his cows each month.

### Report of the Quality Control Department Philadelphia Inter- State Dairy Council

The following is a report of the work done by the Quality Control Department of the Dairy Council, for the month of January, 1929.

No. Inspections Made.....	1741
Sediment Tests .....	1841
No. Permanent Permits Issued .....	62
No. Temporary Permits Issued .....	72
No. Meetings Held .....	8
Attendance .....	1301
Reels Movies Shown .....	4
No. Man Days— Fairs and Exhibits.....	69½
Bacteria Tests Made (Plants) .....	19
No. Miles Traveled .....	17167
During the month 20 dairies were discontinued from selling for failure to comply with the regulations—9 dairies were reinstated before the month was up.	
To date 124,449 farm inspections have been made.	

## The Cooperative Selling Organization For Dairy Produce in Holland

By K. ERIKS, Director Freisland Cheese Export Cooperative Association, Holland

The Managers of the local cooperative factory producing dairy products are in a weak position to bargain with those to whom they must sell their goods, for these cooperatives are not able to analyze in a sufficient way the market, and their products can only be stored when high costs are to be paid for it.

We have found in Holland that by establishing a cooperative organization for selling their products, local dairy cooperatives are able to realize the following advantages:

1. By delivering their products to the best markets they strengthen their position in the trade.
2. By the specialization in selling they get a clearer knowledge of the market.
3. By centralizing their warehouses they keep storing-costs as low as possible.

Through these means the central organization can supply more regularly an even amount of products which are of good quality; the regularity of delivery increases as the total quantity of supplies increases. That portion of the products which is of the best quality should be sold under the trade-mark of the cooperative sales organization. Second quality can be sold under a second trade-mark of cooperative and products of low quality should be sold without a mark at all. By this means the buyer will soon learn to depend on the products of the cooperative and buy them regularly.

It is our experience in Friesland, Holland, that it is of the utmost importance for a cooperative selling organization that the proportion of highest quality products must be as great as possible. For this reason it is necessary that the members are willing to do their best in raising the standard. They should be thoroughly convinced of this fundamental factor. We are fully satisfied that a cooperative organization of producers can have a development which is practically without limit, when the products are of high quality, but it seems to be equally true that there is no good foundation for success when the products are of inferior quality.

For cooperative factories which have but a small proportion of good products or which have a large proportion of inferior products, it is not advisable to cooperate in selling, unless there is a fair chance that by such cooperation they can improve and standardize the quality of their products within a short time.

There are two reasons for this assertion. First, when first quality goods are assembled and sold through one agency the reputation of the product improves, the demand improves and sales become easier and in greater volume; but when large quantities of goods of inferior quality are sold collectively, the agency may start with a good reputation but this will become poorer and poorer and soon sales will come to a standstill. Secondly, the organization itself will be very weak, when products are of inferior quality, for one is inclined to think that his products are of better quality than warranted by the financial settlement for them as made by the cooperative.

In this connection we might lay stress on the fact that the quality of dairy products is in a high degree dependent on the quality of the milk from which they are made and on the conditions under which the products are manufactured. It is now a known fact that members of a cooperative are inclined to pay more attention to sanitary conditions than will be the case when those producers sell their products to a private firm; for there is a direct financial relation between the careful methods of the members and the value of the products of the cooperative. For this reason we believe that the cooperative is the best organization form for large scale sales organizations.

It will be clear to everyone that it is important for producers to ship their products as soon as possible to the central warehouse. When the products have been received they must be graded and classified when the cooperative has developed to the point that is more than a commission business. This is a very delicate task, which can only be done by employees who have a good idea of the market and of the products and who have good judgment and tact.

It is clear too that the cooperative needs the assistance of technical employees who can find out and prevent the causes of deviations in the quality of the products. This Technical Department should be thoroughly incorporated as a part of the management and should be at all times under the control of the selling organization itself.

It is the experience in our country that it is of the utmost importance that a cooperative starts with the help of technical employees who combine a high degree of modesty with an equal degree of judgment of men.

Taking these conditions into consideration, we feel sure that a sound foundation can be laid for a cooperative which tries to look after the interests of the producers.

We have pointed out that the grading of the products is necessary for the development of the organization and that it is of fundamental importance that the quality of the products is regularly of a high standard.

As to the government standards, the government of the Netherlands does not give any requirements as to the quality of the products, but only its purity is guaranteed. It is not allowed to export butter and cheese made of other than milk substances, while the moisture percentage of the butter and the fat percentage of the cheese is subject to maximum and minimum requirements.

For some years we did not have such requirements in Holland and the result of it was that the fat percentage in the cheese in the market varied from 5 to 50 and the cheese was sold "on its merits". As a rule the buyer thought the fat percentage of the inferior products higher than it was and the most unscrupulous seller secured the best price.

This confusion could only be solved by the government, which fixed cheese standards at 20, 30 and 40 percent of fat and full cream cheese.

We are convinced that the government of Holland has been right in taking this action, but we do not regret it that no quality standards have been created. Our products are consumed all over the world and consumers in every country have their special demands. Gouda and Edam cheese which are considered by some buyers as not of a superior quality for a certain market, can still be exceptionally good for another market, whereas a good Cheddar cheese is good everywhere. So it is possible for the Government of a country which produces Cheddar cheese to fix quality standards but for a country like Holland where Gouda and Edam cheeses are made, this would not be possible.

For this reason we think it best that the Netherlands government reserves the judgment of the quality of the cheese to the consumer himself.

Fewer Food Law Violations in Penna. in 1928

With three exceptions, the number of prosecutions for violating Pennsylvania food laws was the lowest in 1928 of any year since 1910, according to Dr. James W. Kellogg, director of the State Bureau of Foods and Chemistry.

"This low number of violations in the face of even greater effort to detect food adulteration and misrepresentation indicates that the quality of foods offered for sale in Pennsylvania is better today than ever before in the history of the Commonwealth."

One of the outstanding violations discovered during the year was the coffee-chicory fraud in western Pennsylvania which required approximately 100 prosecutions before the adulteration was completely stopped. The adulteration of olive oil with cotton-seed and other vegetable oils was another extensive fraud which required a large number of prosecutions.

Other cases of special interest were the large number of legal actions involving the sale of bakery products containing imitation jelly instead of the pure jelly. Other violations more frequent in the past but still existing to a limited extent in the Commonwealth include the sale of cold storage and stale eggs as fresh eggs, the sale of milk and cream deficient in butter fat, the sale of honey adulterated with glucose, the sale of decomposed meats and fish, the sale of butter adulterated with water, the sale of artificially colored and misbranded carbonated beverages and the sale of watered oysters.

Plant in Long Rows

Do away this year with the old-fashioned garden of beds and paths, State College vegetable specialists urge. "Throw the whole garden into one bed. Plant and sow in long rows and use a modern wheelhoe for cultivating. This method insures greater returns with less work."

The hotbed and coldframe sash should be repaired and the frames put in condition for use. Put the glass on the frames, and as soon as the soil thaws and dries sufficiently to be worked easily sow cabbage, lettuce and other cool weather crops.

### Farm Real Estate Situation Improved

A more favorable status of the farm real estate situation is reported by the Bureau of Agricultural Economics, United States Department of Agriculture, is a lessening rate of decline in farm land values.

Farm land values on March 1, 1928, says the bureau, brought the national average value to the level that prevailed in the year 1917. This is 17 points above the 1912-14 level taken as the pre-war average, and 20 points higher than the value in 1912, the earliest year for which data are available. Reckoned as a percentage of its 1920 peak, the national average on March 1, 1928, had come down about a third.

Discussing the farm-mortgage credit situation, the bureau declares that "first-mortgage money is generally in good supply. Interest rates generally have continued to be favorable. Terms offered by owners to move farms in the present market are frequently unusually favorable to buyers. However, the easiest terms usually go with the poorer lands."

The general tendency of farm taxes has been "slightly upward" during the past year, says the bureau, and there is little likelihood of any marked decrease in the next few years. The only possibility of a radical decline in farm taxes, it is pointed out, is in a revision of State and local revenue systems that will make something other than the sales value of real estate the criterion of tax liability.

### Penn State Dairy Herd Numbers 150

The Pennsylvania State College dairy herd now numbers 150 animals, representing the Ayrshire, Brown Swiss, Guernsey, Holstein, and Jersey breeds, Prof. A. A. Borland, head of the dairy department, announces. Of these 75 are cows producing milk.

Besides their producing ability the college dairy cattle are maintained also for the purpose of instruction and research work. For instruction the herd serves for practice work for students in the judging, feeding, care, and management of dairy cattle. For research purposes the animals furnish data concerning the milk-producing capacity of various feeds, the value of grinding roughages, the vitamin and mineral requirements of dairy cattle, the use of milk substitutes for raising calves, the relation of type of milk production, the effects of molasses on the digestibility of rations, and a large number of other subjects.

Through the use of good sires improved production is constantly being attained. A mature Jersey bull, Raleigh's Warder, was recently obtained from the Borden Home Farm in New York. Ten of his daughters have averaged over 400 pounds of butterfat as 2-year-olds on twice a day milking. Another recent purchase is a Guernsey sire, Langwater Master Fred, from Brooknead Farm in Chester county. He is the sire of twelve 2-year-olds averaging 555 pounds of butterfat.

It is said that if the United States cold storage facilities were united into one ice-box, it would be a mile long, half a mile wide, and nearly 48 feet high.

If you can get good seed now, buy it, for prices may be higher in the spring.



Name \_\_\_\_\_  
Address \_\_\_\_\_



*... a book of interest to  
every farmer*

**T**HE modern farmer has almost countless uses for concrete because of its permanence, economy and ease of application to all kinds of building.

The new booklet, "Permanent Farm Construction," is a practical working manual on farm concrete. It tells how to use concrete for barns, granaries, silos, septic tanks, and every structure required on the modern farm. Detailed suggestions for mixing and placing concrete are given, together with a large number of useful photographs and diagrams.

With this book as a guide, any farmer can make many profitable improvements on his farm at small cost. A free copy will be mailed to you upon request. Write to

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## Concrete for Permanence

# Certified Seed Potatoes

**NORTHERN MICHIGAN RUSSETS—PRINCE EDWARD ISLAND COB-  
BLERS AND MOUNTAINS—NEW YORK RUSSETS AND RURALS**  
High-Yielding Strains—Officially Inspected and Certified. Car lots or Bag Lots.  
Let us quote prices on your requirements of potatoes and other farm seeds.

HONEYE FALLS, N. Y.

Pennsylvania a  
Leader in Agriculture  
Among Eastern States

The total value of farm crops produced in this Commonwealth in 1928, in spite of the decrease of approximately \$30,000,000 from the 1927 total, exceeded by approximately \$1,000,000 the value of agricultural crops produced in all the New England states and New Jersey combined.

When considering only the value of the 22 leading field crops, Pennsylvania is the outstanding agricultural state in the East, according to the Pennsylvania Department of Agriculture. No other state east of Ohio produced more oats, corn, winter wheat, rye or buckwheat in 1928 than did Pennsylvania. In fact, no other state in the Union produced more buckwheat or cigar leaf tobacco. Only one other state produced a more valuable potato crop and only three states produced more valuable apple crops.

The rank of Pennsylvania among all other states in the 1928 production of the various crops is as follows.

First in buckwheat.  
First in cigar leaf tobacco.  
Fourth in tume hay.  
Fifth in potatoes (second in value).  
Fifth in grapes.  
Sixth in total apple crop (fourth in value).  
Sixth in pears.  
Seventh in rye.  
Seventh in all tobacco.  
Seventh in peaches.  
Ninth in winter wheat.  
Ninth in commercial apples.  
Fourteenth in oats.  
Sixteenth in corn.  
Sixteenth in value of 22 field crops.  
Eighteenth in value of all crops.

The following figures give the total production and total value of crops produced in Pennsylvania in 1928, according to the estimate of the Federal-State Crop Reporting Service:

CROP	PRODUCTION	VALUE
W. inter. Wheat...	50,037,000 bus.	\$44,534,000
W. inter. Wheat...	17,066,000 bus.	22,615,000
Oats...	34,674,000 bus.	18,370,000
Barley...	785,000 bus.	658,000
Rye...	1,596,000 bus.	1,708,000
Wheat...	5,802,000 bus.	3,584,000
White potatoes...	31,980,000 bus.	20,787,000
Tobacco...	49,580,000 lbs.	6,941,000
Time hay...	4,645,000 tons	58,062,000
Apples (total)...	8,460,000 bus.	9,729,000
Apples (com.)...	1,045,000 bus.	5,442,000
Peaches...	1,867,000 bus.	2,800,000
Pears...	620,000 bus.	744,000
Grapes...	22,680 tons	1,045,000

Report of the Field and  
Test Department Inter-  
State Milk Producers'  
Association.

The following statistics show the aggregate operations of all the Inter-State Milk Producers' Association field men in connection with testing, weighing and general membership work, for the month of January, 1929.

No. Tests Made .....	7389
No. Plants Investigated..	48
No. Membership Calls ..	210
No. New Members	
Signed .....	46
No. Cows Signed .....	310
No. Transfers Made ....	22
No. Meetings Attended ...	13
No. Attending Meetings..	1596

Uncle Ab says most reformers are folks who can't stand seeing someone else have a good time.

## Broad Program of Research Adopted at Corn-Borer Conference

A complete program of research for controlling the European corn borer was presented and adopted at the third annual conference of corn-borer interests in Washington, D. C., January 2. More than seventy representatives from the corn-borer infested States and the Corn Belt, including entomologists, administrative officials and others interested in the problem, attended the meeting.

Dr. A. F. Woods, Director of Scientific Work, United States Department of Agriculture, as chairman of the conference, opened the day's session by a brief address in which he urged a free discussion of the many angles of the problem and explained the purpose of the conference was to provide for a complete coordination of the various research projects throughout the affected States and Canada.

The program as adopted for 1929 includes definite research work by six bureaus of the United States Department of Agriculture—Entomology, Plant Industry, Chemistry and Soils, Public Roads, Animal Industry, and Agricultural Economics. Seven States—Illinois, Indiana, Michigan, Ohio, New Hampshire, Pennsylvania and New York—also will carry on research and educational work in the numerous phases of the borer problem.

Among the thousands of major and minor lines of investigation all of which have an important bearing on the final solution of the problem will be studies by these Federal bureaus and States on feeding and otherwise using cornstalks in breeding experiments to produce strains that may prove tolerant to the borer. Studies of fertility treatments to hasten development of the corn plant so as to miss the maximum moth flight, and studies on the possibility of displacing the corn plant with other crops of equal value.

Investigations with insecticides, repellants, and attractants will be conducted. The important projects now under way to introduce and establish parasites of the borer from foreign countries will be continued. Studies of the life habits of the pest will be carried on to furnish information necessary for a practical program in combating spread and control of the borer

Effort will be continued to determine the value of fall and spring plowing in different types of soil, with different widths and types of plow bottoms, on different dates, and at various depths.

In fact, no line of investigation that promises to furnish useful information on the borer problem has been omitted from the 1929 program. A new committee representing the American Society of Animal Production reported at the conference and pointed out that 80 per cent of the corn produced is fed to livestock. Therefore, the committee stated, any menace to the corn crop is of vital interest to the animal husbandman. In this connection the 1929 program includes studies on the use of other feeds and pastures in greater quantities to meet a possible shortage of corn.

In again, out again is the way some farmers carry on their hog business, and down again, up again go the hog prices in turn. Either staying out of the business or in it would result in more stable prices.

## February. 1929 Inter-State Prices at all "A" Milk Delivery Points

[illegible]







[illegible]

**NOTE**

The basic prices quoted in the above tabulation are based on the conference price which has been in effect since September 16, 1926, for "B" milk of 8 cents per quart containing 4 per cent Butterfat delivered F.O.B. Philadelphia, Pa. This price is equal to \$5.69 per 100 lbs.

The base price for 3.50 milk defined in the specifications of the Inter-State "A" milk plan is obtained by subtracting 20 cents (5 points of Butterfat at 4 cents per point) per 100 lbs. from the price of \$5.69 obtained above.

1. Follow in the line of your receiving station until the butterfat test of your milk for February is reached.

2. The price of your milk will be found in the column in which your bacteria count for February is tabulated.

**If you wish to check on your price for Basic "A" milk, keep this issue of the Milk Producers' Review.**  
**Complete prices will be printed in the future only when basic price changes affect quotations.**

March 1929



## Candy for the Kiddies

To be or not to be generous with the candy jar, is a preplexing question to mothers. How is one to know.

Many new things have been learned about the value of candy. We know it acts as fuel in the furnace of our bodies to provide energy. It is also easily digested by most people. The old idea that it causes teeth to decay is recognized to be false. If you have a tooth ache when you eat candy be thankful for the danger signal, and go at once to your dentist!

After all, candy remains merely candy; a concentrated form of the sugar whose only fault is its perfection," says Dr. Morris Fishbein, "It is so pure that man cannot live on it." This is where a word to the wise is needed. Candy may safely have a place in the growing child's and the adult's diet, but is not a roast beef dinner, nor can it be substituted for a balanced meal. Pure sugar contains only energy value,—and no other food factors. It is lacking in certain important things, among them vitamins, minerals, protein and bulk.

It is because of these limitations that care must be taken that it is used in such a way that the appetite is not dulled for those foods which are essential for growth and health. This is particularly necessary in the case of children. Don't start the in-between-meal habit! Instead, take fruit or a glass of milk, saving the candy for dessert after the meal.

Candies which contain fruits and nuts have more nutritive value. Choose for the family, these or the clear hard varieties in preference to the richer creams and chocolates. Dates, raisins, or figs are wholesome, and may be used freely. But no candy whatever before two years old!

"Should my Bobby of two years old have candy? I gave it to all of my other children when they were his age, and they have never been sick a day." No, but you have had to coax them to eat creamed carrots, and the oldest refuses to eat his cereal unless it is heaped high with sugar.



## Building Strong Teeth

"Two sets or three?" is the question asked today. Mothers are learning that with proper food and care it is possible to keep the first two sets of teeth in good working order as long as they are needed. The third set is necessary in an emergency.

The little maiden in the picture is showing us her first set of teeth, well formed and regular. They show that Mother has chosen the right diet both for herself and her baby. Few people realize that the period before birth has a very important influence on the teeth of the child.

Nature intends children to be as well formed as possible when they are born and if the proper food elements are not

[illegible]

—Zone Prices plus 1 cent per 100 lbs. A—Same Butterfat Minimum Requirement as in effect for Basic Milk at each Rec. Sta.

)---Zone Prices plus 1 cent per 100 lb.



## Council Conducts

Cafeteria Experiment  
(A reprint from the Chester Times of January 5, 1929)

"Happy Inn!" Where is "Happy Inn", and what is it? No advertisement has appeared, nor is it open to the public. Nevertheless, 600 eager people awaited its opening, and now constitute its group of patrons.

"Happy Inn" is a vision realized—a dream come true. It stands for the re-organized, reconstructed students' cafeteria of the Smedley Junior High School. And it is a unique and charming spot, well worth a visit.

Typical of most school lunch rooms, the location of the Smedley cafeteria is in the basement. Typical also are its windows, set close to the ceiling, its cold brick walls, and its maze of overhead pipes. With the best intentions in the world, it is difficult to camouflage a basement. Generally speaking, once a cellar, always a cellar.

But there is a man who has more vision than most of us; a man who counts thousands of children in many parts of the country as his friends. Backed by the Philadelphia Inter-State Dairy Dairy Council, Cliff Goldsmith—or Professor Happy, as the children call him—had a vision of what these cellar cafeterias might become, if money and talent and cooperation could be enlisted for the purpose.

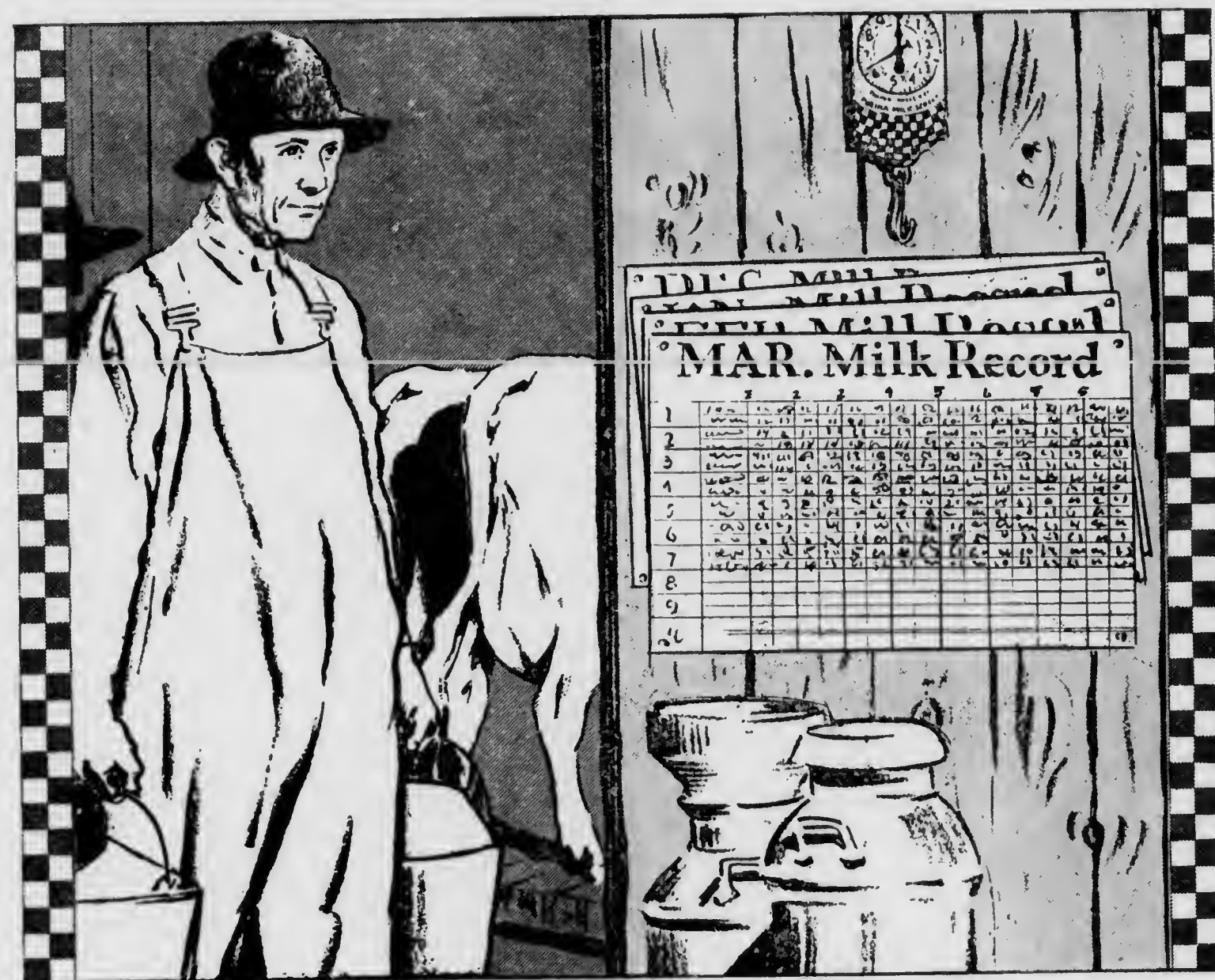
And the delightful thing about it all is that the students threw themselves wholeheartedly into the job of decorating their dining room. Carpenters and masons engaged by the Council made changes in the contour of the big room. An eastern window, formerly blocked off, was again opened to the daylight. Dingy walls were transformed by the application of paint—delicate green and pale gold. The high windows ceased to be ugly, when the boys of the manual training class set in place the window boxes they had built. The charm is further enhanced by dainty tie-back curtains of white mull that were made by the girls in the sewing classes.

The zinc linings for the window boxes were made by the boys of the machine shop group. Festoons of English ivy, planted by the nature classes, grace the boxes.

At one end of the long room, usefulness and beauty meet in the copper drinking fountain, which is a replica of a wall fountain from France. The boys assisted in this work, and also made the table which stands beneath the fountain. In the art classes there was great activity, for students made the softly colored parchment shades for the electric lights, and designed and decorated many pretty paper plates that stand on the plate shelves. The scalloped awing of brightly colored glazed china over the long counter was made in the sewing classes. Sandwich and fruit baskets have been woven by the boys and girls.

And the tables to which the children carry those pretty enameled trays with their tempting food—these were covered in bright shades of enamel cloth, by volunteer students, who worked hard, even in the holiday season, so that all might be in readiness for the opening of "Happy Inn."

Even the name itself was the thought of the children. Each had a chance to submit names, and to vote for his choice of those submitted. "Happy Inn," in honor of Professor Happy, was the suggestion of Viola Sidwell, of Room No. 20, and was the popular choice.



## How will they MILK the last four months?

**ANY GOOD COW** is going to give a lot of milk right after calving. Nature sees to that.

But it takes the first half of the lactation period to pay her board. It's the last part that makes you the profit.

That's why shrewd dairymen say you can't judge any feed until you see what it produces through the whole lactation period.

These dairymen feed Purina Cow Chow. They have satisfied them-

selves that Cow Chow pays best through the whole lactation period. They have found that the proteins and minerals in Cow Chow supply exactly what they need to supplement their home grains and roughage. And they have found that the extra profit from extra milk shows up most during the last few months of the lactation period.

Talk it over with your feed dealer, with the Checkerboard sign.

PURINA MILLS, 854 Gratiot St., St. Louis, Mo.  
*Sold at the stores with the checkerboard sign in the United States and Canada*

# PURINA CHOWS

cows—calves—hogs—steers      sheep—horses—poultry



The Council has put in cream colored china, with a decoration of Dresden figures, designed especially for "Happy Inn". Amber glasses replace the usual clear glass tumblers; the sherbet glasses are pale green.

The experiment is being watched with interest, and the full data will be recorded for the information of schools throughout the United States.

Note:—This project is being conducted in cooperation with the Board of Education of Chester, with the cooper-

ation of Miss Margaret Stetser, Principal, and Mrs. Edith S. Rose, Director of Home Economics.

### Silage is Good Sheep Feed

Good clean corn silage is one of the best roughages that the flockmaster can use. The best shepherds use this grain mixture with corn silage and clover hay: 300 pounds of oats, 100 pounds of shelled corn, 50 pounds of bran, and 25 pounds of oil meal.

### Prepare for Gardening

Are your garden tools in good condition? This is the time of the year to repair and sharpen them. Are you using the best labor-saving hand tools? There is a large assortment from which to choose. There is a tool for every need which makes gardening a pleasure.

When the village cynic says that the 4-H club work is nonsense, ask him how it is prizes frequently go to club members over the experienced farmers.

## County Meetings

### Producers' Association and Dairy Council Cooperate

For several years the Inter-State Milk Producers' Association and the Dairy Council have cooperated in the presentation of various educational programs at county meetings throughout the Philadelphia Milk Shed. These programs have varied from time to time. The latest presentation is now being shown in various sections of the territory.

Every feature of the present presentation is a new one, and the program is being well received.

"What's the Big Idea" is the title of new comedy drama, presented by Interstate and Dairy Council talent. The play is staged by five characters. It is

developments of the market and prices of milk are also presented.

Another feature of the program is an address by C. I. Cohee, Director of the Quality Control Department of the Dairy Council. In addition to bringing out the necessity of producing a product satisfactory to the market demands Mr. Cohee stresses the development of a new educational movement, "selling milk salesmen on milk." This has to do with the educational development of a milk salesman, so that he may know his product and the best method of presenting it to the consumer.

You have probably all heard Prof.



"Reproduction of a scene," as presented at the Annual Meeting of the I. S. M. P. A."

interesting and amusing and holds the attention of the audience throughout its presentation. It might be termed a descriptive organization presentation.

This new play had its first presentation at the time of the annual meeting of the Inter-State Milk Producers' Association in November last, and has since been presented as a part of the county meeting program in various sections of the milk shed.

In the usual county meeting program addresses are made by Frederic Shangle, vice president of the Inter-State Milk Producers' Association. Mr. Shangle briefly relates market conditions in the territory, outlines the activities of the association and its methods in connection with the developments of good marketing practices. The most recent de-

Happy—well he is another feature on the program—"Barnyard Golf" is the title of his address and, well, if you have never heard him, be sure to go to the next county meeting and hear him put his story over.

This country program has already appeared before over 4000 persons in various sections of the Philadelphia Milk Shed. It is extremely interesting—some solid matter, a little bit of fun and enough to keep you interested and amused from start to finish.

Presentations can be arranged for at county or group meetings. For details, communicate with any officer or director of the Inter-State Milk Producers' Association, or write C. I. Cohee, Dairy Council, Flint Building, Philadelphia, Pa.

### Federal Indemnity Limit for TB Cattle Raised on Grades and Purebreds

Increases in the maximum indemnity that may be paid by the Federal Government for grade and purebred cattle condemned because of tuberculosis are announced by the Bureau of Animal Industry, United States Department of Agriculture. The maximum Federal share in indemnity payments for grade cattle is increased from \$25 to \$35, and the amount for purebred cattle has been raised from \$50 to \$70. The new scale became effective February 19, 1929, through the passage by Congress of the agricultural appropriation bill for the fiscal year 1930.

The other provisions in connection with the payment of Federal indemnity for tuberculous cattle are the same as heretofore, namely, that it shall not be more than one-third of the difference between the appraised value of the animal and the salvage value, and that the Federal payment shall not exceed the amount to be paid by the cooperating state, county, or municipality.

### Philadelphia Inter-State Dairy Council Incorporated

**General Offices**  
Flint Building, Philadelphia  
A co-operative movement, established for the dissemination of information and publicity pertaining to the production and distribution of dairy products and their food value in nutrition.

Affiliated with the National Dairy Council

**Officers**  
Dr. Clyde L. King, President  
H. D. Allebach, Vice President  
R. W. Balderston, Executive Secretary  
R. J. Harbison, Jr., Treasurer

**Departmental Branches**  
C. I. Cohee, Director Quality Control Department  
Lydia M. Broecker, Nutrition Department  
Del Rose Macan, Dramatic Department

### Water Dairy Cows

Water, and lots of it, is very important in dairy cattle feeding. Cows in milk should have water twice daily and it should not be ice cold. It pays to put a heater in the water tank if it is outside in freezing temperature. If water has the chill removed cows will drink more and give more milk.

No. 3  
OF A SERIES OF AMCO-FED HERDS

## A VARIABLE FORMULA BUT STEADY PRODUCTION ON AMCO 20% DAIRY RATION



Pasture scene at Albion Holstein Farm, Albion, R. I. This herd produced an average of 11,324 lbs. of milk and 353.9 lbs. of butter fat.

**VARIABLE** formula Amco rations work out most satisfactorily in actual farm practice at Albion Holstein Farm, Albion, Rhode Island. The fifty odd members of this herd have been fed Amco 12% Fitting Ration, and Amco 20% Dairy Ration as long as these feeds have been sold in New England. The young stock and the dry cows get the Amco 12% Fitting Ration, which carries the variety of proteins and the minerals which those animals require for growth and reproduction. After freshening, the cows are changed over to AMCO 20% DAIRY RATION. Last year, the average production for all the milkers including first calf heifers, was

11,324 lbs. of milk  
353.9 lbs. of butter fat

High average production for this herd is the aim of its manager, and it is reached by the continued use of flexible formula Amco rations. The formula may change with the markets but the results do not.



Mabel Pontiac Sylvia 669231 gave 15,387 lbs. of milk in 10 months and 20 days on AMCO 20% DAIRY RATION



Colantha Butterfly 2nd 776408 produced 13,526 lbs. of milk and 543.1 lbs. of butter fat on Amco rations.



Ségis Johanna Hartog Sylvia 669233 ate Amco 20% Dairy Ration and made 14,000 lbs. of milk and 515 lbs. of butter fat in 11 months.

DIVISION OFFICE:  
MUNCY, PA.



# AMCO

FEED MIXING SERVICE  
AMERICAN MILLING COMPANY  
EXECUTIVE OFFICES: PEORIA, ILL.

Plants at: Peoria, Ill.; Omaha, Neb.; Owensboro, Ky.  
Alfalfa Plants at: Powell, Garland and Worland, Wyo.



## THE GOVERNMENT ON POTATOES

Government Bulletin No. 1188. "It is significant that the yield of potatoes is less, and the cost of production greater on farms where planting is done by hand than on those planted with machines."

### Now—About the Planters

The McCormick-Deering potato planter handles cut seed and small whole seed with an accuracy as nearly one hundred per cent as it is possible to obtain with a mechanical planter. It possesses new and distinctively McCormick-Deering features, and employs the latest, approved principles of potato planter construction. Let your nearest dealer demonstrate the one or two row planter.



The International Harvester Co.  
of America

Philadelphia Harrisburg Baltimore

## WHY USERS of Purity Strainers GET GRADE "A" TESTS

**It Strains Milk  
ABSOLUTELY CLEAN**

Absolutely clean milk grades higher and means more money for the producer. Unless milk is CLEAN it will not test Grade "A", regardless of its percentage of butterfat.

Dr. Clark's Purity Strainer with its sterilized cotton disc clamped on the bottom is the ONE strainer guaranteed to strain your milk 100% Clean. No other strainer can compare with PURITY for simplicity and real efficiency. That's why they are used by thousands of farmers, creameries and large condensaries. Sold by good dealers everywhere. Made in two sizes—10 qt. and 18 qt.

**10 Day Trial Test**  
Write at once for our 10 Day Trial Test Offer. Find out how you can test the PURITY strainer and get your money back if it doesn't remove every particle of dirt, dust and sediment from your milk. We will send complete particulars of our "10 Day Trial Test Offer" by return mail.

**PURITY STAMPING CO.**  
Dept. F4 Battle Creek, Mich.

**DR. CLARK'S  
Purity  
MILK STRAINER**

TRADE MARK **NICE** REG. U.S.A.

THE NAME TO GO BY—WHEN YOU GO TO BUY  
**PAINT AND VARNISHES**

Write for color Cards and Booklet "Paint Pointers"  
**EUGENE E. NICE COMPANY, Inc., PHILADELPHIA**

A load of manure on the fields where it can do good is worth two on the manure pile where it only wastes away. Milk your cows immediately before instead of after feeding them and you will avoid off-flavors.

## Cow Testing Associations

Sixty-eight Pennsylvania Cow Testing Associations with 23,395 cows were on test during December 1928.

There were 2714 cows in the 40 pound butterfat class and 3047 cows produced over 1000 pounds of milk. Cows in the 50 pound of butterfat group numbered 924, while 1855 passed the 1200 pound mark in milk production.

The Wayne Association tested 539 cows, the largest number for a single association, and Coventry association in Chester County was second with 534 cows tested. The Mahanoy association in Wyoming county had the largest number of 40-pound cows, 168, and Wayne was second with 102. The Cumberland No. 1 association led in 1000-pound milkers with 130 reported. Montgomery No. 1 was second with 120 of the heavy milkers.

The best 10 cow average in butterfat, 86.8 pounds, was made in the Laurel Hills association in Bradford county, West Susquehanna No. 2 ranked second with 76.2 pounds.

### Oxford Cow Testing Association

The Oxford, Chester County Association finished its year on January 1st, with 13 whole year and 2 part year members. The total number of cows for a part of the year was 368.

The record for the whole year members was as follows:

Average number of cows in the Association	220.75
Average per cow—Pounds of milk	7088
Pounds of butterfat	290.6
Percent of butterfat	4.1
Value of product	\$229.07
Cost of roughage	42.80
Cost of grain	55.71
Total cost of feed	98.51
Value of product above feed cost	130.56
Returns for \$1.00 expended for feed	2.38
Feed cost per 100 lbs. milk	1.39
Feed cost per pound butterfat	.34

Four herds, those of Norman Thompson, B. and L. O. Hansen, J. S. Reiser and James Hastings, produced better than 300 pounds of butterfat.

Individual cow records were as follows:

Group 1—Between 500 and 600 pounds butterfat	6
Group 2—Between 400 and 500 pounds butterfat	14
Group 3—Between 300 and 400 pounds butterfat	56

Total ..... 76

### West Chester Cow Testing Association

The West Chester Cow Testing Association finished its sixth year on January 1st. There were eleven whole year and three part year members. The total number of cows in the association was 632.

The following is a report of the whole year members:

Average number of cows in the Association	368.27
Average per cow—Pounds of milk	8287
Pounds of butterfat	305.0
Percent of butterfat	3.7
Value of product	\$311.01
Cost of roughage	42.74
Cost of grain	60.89
Total cost of feed	110.63
Value of product above feed cost	200.41
Returns for \$1.00 expended for feed	2.51
Feed cost per 100 pounds milk	1.33
Feed cost per pound butterfat	.35

Five herds, those of Wm. I. Reeves, R. E. Sharpless, M. L. Jones, Garrett-Williamson Lodge and Wm. B. Rhoads produced an average of better than 300 pounds of butterfat.

Twenty-six cows in the association produced better than 400 pounds fat. These cows were among those of the herds of R. E. Sharpless, (7); M. L. Jones, (8); Robert F. Brinton, (5); Delaware County Home, (2); H. E. Jones, (2); and one each on the farms of Garrett-Williamson Lodge and Wm. I. Reeves.

### Montgomery County Cow Testing Association, No. 2

The Montgomery County Cow Testing Association, No. 2, finished its first year on January 1st, 1929. There were 16 whole year members. There were 603 cows in the association during all or part of the year.

#### The Year's Record

Total number of cows (average)	412.24
Average per cow—Lbs. milk	7157
Lbs. butterfat	290.6
Percent of butterfat	4.1
Value of product	\$295.81
Cost of roughage (including pasture)	50.09
Cost of grain	70.33
Total cost of feed	121.02
Value of product above feed cost	174.79
Returns for \$1.00 expended	2.44
Feed cost per 100 lbs. milk	1.69
Feed cost per pound of fat	.43

Grouping of all cows producing above 300 pounds of butterfat.

Group 1—500-600 pounds fat	2 cows
400-500 pounds fat	14 cows
300-400 pounds fat	97 cows

Total ..... 113 cows

#### Individual Herd Record

Eight herds with an average of five or more cows exceeded an average production of 300 pounds of butterfat. A list of those herds follows:

Owner's Name and Address	Ave. No. Cows	Lbs. milk	Lbs. fat
Erdenheim Farm, Norristown, R. D. 4	13.75	6675	362.5
J. L. Overly & Sons, Red Hill	11.06	9634	335.0
Daniel Buckley, Broad Ave	6.58	7131	319.1
Wm. Stephens, Collegeville	15.25	7820	317.4
State Hospital, Norristown	78.25	8537	310.3
Wm. Pratt, Willow Grove	23.25	8168	308.1
C. E. Ingersoll, Penn Llyn	21.08	6137	308.5
Frank Brinckman, Red Hill	7.25	8555	305.0

## The "Proved" Sire is the Hope of the Dairy Industry

A factor of great importance in the building up of a dairy herd is the use of a good proved bull, says O. E. Reed, Chief of the Bureau of Dairy Industry, United States Department of Agriculture.

To prove a bull, according to the standards set by the bureau, it is necessary to compare the yearly records of at least his first five daughters with the records of their dams. Such a comparison indicates the probable value of a bull to a herd.

The record of one outstanding sire that was proved in a Vermont dairy-herd-improvement association was pointed out by Mr. Reed. The first reports received of this bull included records of 15 daughters and their dams. The dams were, without exception, much better than the average dairy cows of this country. The lowest producer had a record of 314 pounds of butterfat, and the average of all the dams was 386 pounds. The 15 daughters of this sire, however, averaged 545 pounds of butterfat. Here was an average gain of 159 pounds of butterfat, or more than 40 per cent. Even more remarkable, every one of the 15 daughters was a better producer than her dam. The sire is to be credited with most of the improvement. He possessed to a remarkable degree what is known as "prepotence" in milk production.

Last year, according to Mr. Reed, only 200 dairy bulls were proved in 660 dairy-herd-improvement associations. It was found that of this number only one in six was still alive at the time he was proved. Some proved bulls should be slaughtered, because their records are bad, but the prepotent bulls which have demonstrated their ability to sire daughters more productive than their dams should be kept as long as they are useful.

When the exchange of bulls becomes a regular practice they can be kept until they are proved. This important phase of the work in the dairy industry is not receiving the attention that it should, and much greater effort than is now being expended should be put forth to preserve the lives of meritorious bulls. The general practice of using only good proved bulls, Mr. Reed believes, will result in a material increase in the production of the dairy cows of the country.

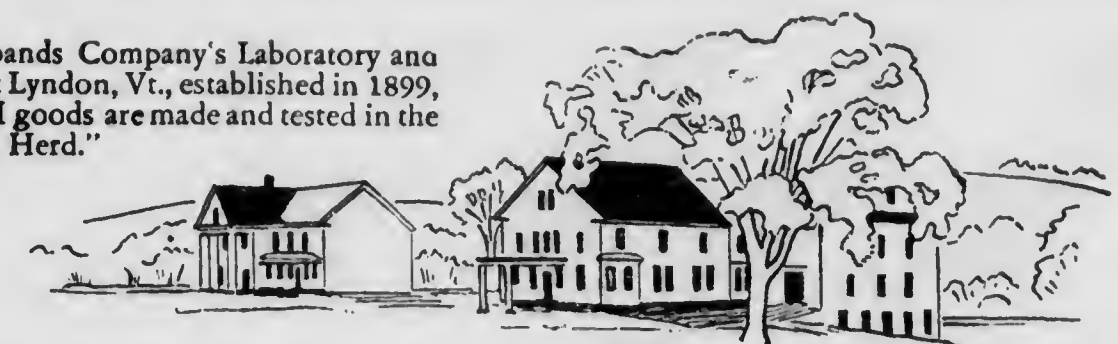
## Big Waiting Lists in TB Eradication

More than 2,000,000 cattle were on the waiting list for tuberculin testing at the end of 1928, according to a statement issued by the United States Department of Agriculture. This fact, according to veterinarians in the Bureau of Animal Industry, indicates an attitude of effective cooperation on the part of stock raisers and dairymen generally, and also that the 1929 record of tuberculin tests is likely to rank high in comparison with other years.

On January 1, a total of 629 counties in the United States had been recognized as "modified accredited areas," signifying that after tests the Bureau of Animal Industry regarded them as practically free from bovine tuberculosis; and cattle in accredited herds numbered 2,164,105. More than 23,000,000 cattle are in herds under bureau supervision for the eradication of tuberculosis, and the waiting list on January 1 numbered 2,160,517 cattle.

To disconnect electric appliances pull on the plugs rather than on the cords, and save the delicate wires inside.

"Our Husbands Company's Laboratory and buildings at Lyndon, Vt., established in 1899, where O-H goods are made and tested in the O-H Dairy Herd."



## Increase your milk production this way~

In the formula for O-H COW TONE is found a combination of mineral and vegetable powders that is JUST RIGHT FOR COWS. It supplies certain elements that cows need if they are to do well during the winter months. Try the Cow Tone this winter—a tablespoonful twice a day mixed with the grain. The gain in milk will prove that profits come only through the correct physical conditions of your cows, and that the O-H way is the right way.

**O-H COW TONE for Milk Production**  
**COWS' RELIEF for Udder and**  
**Teat Troubles**  
**CALVES' CORDIAL for Scours**

O-H goods have been on the market with dealers and jobbers for years. If more convenient for you we will send them prepaid, if requested, on receipt of price. Cow Tone 50c - \$1.00, or 25 lb. box \$4.50, 50 lb. box \$8.25. Cows' Relief 50c - \$1.00. Calves' Cordial 50c.

**OUR HUSBANDS CO. - LYNDON, VT.**



A group of seven grade Jerseys bought into the O-H Dairy Herd for demonstration developed two 45 lb. cows. The average test for the seven was 4.8 last winter.

OUR BOND is on every package of O-H goods. Your money back if you are not satisfied.



Send for the O-H Cow Book

## Agricultural Council Committees for the Current Year

Following the recent meeting of the Pennsylvania State Agriculture Council of Farm Organizations, announcement of the general committees of the council have been named by President, H. D. Allebach.

### Casualty Insurance

F. P. Willits, Chairman  
Clayton Brubaker  
John H. Light

### Game

Chester Tyson, Chairman  
John Runk  
J. S. Rittenhouse

### State College

Miles Horst, Chairman  
H. D. Allebach  
Kenzie Bagshaw

### Taxation

R. W. Balderston, Chairman  
John H. Light  
Alan Miller

### Farm Products Show

H. D. Allebach, Chairman  
John H. Light  
F. P. Willits

### Rural Electrification

W. S. Wise, Chairman  
M. T. Phillips  
H. D. Allebach

### Miles Horst

M. S. McDowell  
R. G. Bressler

## Farm Commission Approves Show Building

At a special meeting of the Pennsylvania State Farm Products Show Commission, held in the office of Secretary of Agriculture, C. G. Jordan, in Harrisburg, Pa., the proposed building to house adequately the State Farm Show, was unanimously approved, the Commission announced.

The plans call for a building 700 feet square with approximately 430,000 square feet of space for commercial and agricultural exhibits, a coliseum to seat 5,000 people, and sufficient meeting rooms to accommodate the annual conventions of farmers' organizations.

The location of the building on a 45-acre tract of land at Cameron and MacLay streets, easily accessible to the business district and hotels of Harrisburg, has also been approved by the Commission.

In formulating plans for a show building, the Commission is keeping in mind the trend of agriculture in Pennsylvania so that departments which are likely to expand greatly in the future can be housed adequately. Ample space will be provided for livestock in order that this important branch of agriculture can be displayed as has never been possible before.

The Commission has also unanimously endorsed the policy of encouraging the use of the proposed building for industrial shows, state, district and national conventions, indoor athletic events, concerts and various state purposes. A year-round program for making the greatest possible use of the structure is being given careful consideration by the Commission and every inducement to use the building will be offered to industrial and educational as well as agricultural bodies.

## Cleaning that pays from the start

LESS work and time will be required to keep milking equipment, pails, strainers, cans, etc. clean and spotless if you use OAKITE.

This scientific cleaner does its work by emulsification. Sudsless, it breaks up grease and oil deposits into tiny particles so they rinse away quickly and completely. Safe—no harm to tin or other surfaces. Economical, too.

Find out about this money-time and work-saving cleaning material. Write for our 16 page booklet "Oakite for Cleaning in Milk and Dairy Product Plants". No obligation.

Oakite Service Men, cleaning specialists, are located in the leading industrial centers of the United States and Canada.

Manufactured only by

**OAKITE PRODUCTS, Inc.**  
34 F Thames St., New York, N. Y.

**OAKITE**  
Industrial Cleaning Materials and Methods

## Alfalfa Hay For Sale

Weights and grades guaranteed. Prompt shipment. Write for delivered prices.

**JOHN DEVLIN HAY CO., Inc.**  
192 N. Clark St., Chicago, Ill.

Knows the Worst

"Dearest, I must marry you."

"But have you seen my father."

"Yes, many times, but I love you just the same."—The Ghost.



BUY QUAKER FEEDS IN STRIPED SACKS

## Puts Cows At Their Best— And Keeps Them There!



MOLASSES! in dry form is thoroughly mixed into Quaker (24%) Dairy Ration. Cows relish this good feed

**T**HE way Quaker (24%) Dairy Ration brings milk cows to their very best production will please you. But as the weeks and months roll on, and your records stay up you will appreciate why so many successful dairymen stick to Quaker Feeds and methods. Quaker (24%) Dairy Ration is a highly-efficient, safe and dependable feed. It combines nicely with your own roughages; it contains essential minerals. See your Quaker Dealer.

An ideal carbohydrate feed—Quaker Sugared Schumacher. Combines perfectly with any Quaker high protein concentrate (24%, 20% or 16%). A choice feed for young or dry stock; an entire grain ration for horses and a splendid fattening ration for steers, lambs, and swine. At all Quaker Dealers.

Made by THE QUAKER OATS COMPANY, Chicago, U. S. A.

BUY QUAKER FEEDS IN STRIPED SACKS

**HOLSTEINS FOR PROFIT!**  
More Dollars per Cow per Year  
More Butterfat  
Holsteins average highest in yearly butterfat yield and predominate in the leading dairy states, 80% of the cows which have produced more than 1,000 lbs. butterfat in a year are Holsteins.  
The HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA  
230 East Ohio Street, Chicago, Illinois

**LIME-MARL** "Nature's Great Soil Builder"  
Let us send you prices and interesting booklet about this high quality lime.  
FINE DRY FULLY AVAILABLE  
QUICK ACTING—LOW IN COST  
Brings best results at least cost per acre. Write at once for prices delivered your station.  
NATURAL LIME-MARL CO. ROANOKE, VA.  
(2 Plants at Charles Town, W. Va.—B. & O. R. R.)

**Livestock Industry to Have Good Year**  
Prospects of another favorable year for the livestock industry are reported by the Bureau of Agricultural Economics, United States Department of Agriculture in its February 1 report on the agricultural situation.

The 1929 market supply of hogs is expected to be considerably smaller than that of 1928, the bureau says. Some improvement in the foreign demand for American pork products is indicated and no material change in domestic demand is anticipated. Hog prices during 1929 are expected to average considerably higher than in 1928.

The combined spring and fall pig crop of 1928, as indicated by the bureau's pig surveys was about 5 per cent smaller for the Corn Belt than the crop of 1927, but the distribution of the 1928 crop over the Corn Belt States was in better relation to corn supplies than that of the 1927 crop. Information as to hog supplies for the marketing year, November 1928 to October 1929, says the bureau, indicates a slaughter of from 43,000,000 to 45,000,000 head, compared with a slaughter of 48,000,000 head for the crop year 1927-28.

The immediate outlook for cattle, according to the report, continues favorable with prices about at the peak of the cycle. Further reduction in market supplies in 1929 is indicated, but the decrease probably will not be as much as that of 1928. Supplies of grain-finished cattle the first half of 1929 are expected to equal or exceed those in the first half of last year. Any increase in such cattle, however, is likely to be offset by decreased supplies of other kinds of slaughter cattle.

The number of horses continues to decline, and is now at the lowest point in forty years. Judging by the number of colts born in 1928, says the bureau, the number of horses will continue to decline. Horse prices are advancing. The bureau advises that now seems to be an excellent time for many farmers to replace old or worn-out horses with young animals. The number of dairy cows is reported as about the same as a year ago, but yearling heifers and helper calves show some increase in numbers.

In the past, says the bureau, price situations like that which prevails now in the cattle industry have been followed by increased production and reduced prices. Therefore, the bureau advises against new producers entering the industry, but those already in may profit by moderate expansion during the next two or three years even though prices go somewhat lower than at present.

**Good Breeding Pays**  
How about the sire at the head of your herd? Is he from a line of breeding better than your present herd? If not, you better stop using him right now and plan to buy or get the use of a bull that will put your herd ahead. How about joining a bull association or uniting with your neighbors in getting one started?

**Cheap-Skate Logic**  
"Before we were married, Henry," said the young wife reproachfully, "you always gave me the most beautiful Christmas presents. Do you remember?"  
"Sure," said Henry cheerfully, "but my dear, did you ever hear of a fisherman feeding bait to a fish after he caught it?"—Muskogee (Okla.) Daily Phoenix.

### GOOD SEEDS

Practical Garden and Farm Implements, DAIRY and POULTRY SUPPLIES.

Largest Show Room and Stock in the East.

Martin C. Ribsam & Sons Co.  
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Send for Catalogue.  
Myer's Orchard Sprayers,  
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**Clip and Groom Your Cows During Stable Months—It Means CLEANER and BETTER MILK**  
Clipped and Groomed Cows are clean and comfortable and keep dirt out of the milk pail. Clipping and Grooming improves the health of your LIVE STOCK. GILLETTE PORTABLE ELECTRIC CLIPPING AND GROOMING MACHINES OPERATE ON THE LIGHT CIRCUIT furnished by any Electric Power Co. or on any make of Farm Lighting Plant. PRICE LIST ON REQUEST  
GILLETTE CLIPPING MACHINE CO.  
129 West 31st St., Dept. 14, New York, N.Y.  
40 Years Making Clipping and Grooming Machines Only

### DRY SKIM MILK

Best Feed for Calves  
Cuts Feeding Costs

Dry skim milk and water equals liquid skim milk for raising calves. 1 lb. dry skim milk added to 1 gal. water makes 1 gal. skim milk with the same feeding value. Your calves will thrive on it.

**SAVES WHOLE MILK**  
Sell your whole milk and use dry skim milk to rear your calves. It pays big. Write for Bulletin 301 which gives complete ration and tells how to raise better calves. It's FREE. Send 50 cents to cover cost and mailing a four pound sample.  
AMERICAN DRY MILK INSTITUTE  
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Quietness and convenience in Philadelphia's New Hotel

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17th & ARCH STREETS  
Rooms all outside and with bath. All beds equipped with box springs and Nachman inner hair spring mattresses.

**RADIO IN EVERY ROOM**  
Single rooms.....\$3.00 3.50 4.00  
Double rooms.....4.50 5.00 6.00

LUNCHEON .60 and .75  
DINNER \$1.00, \$1.15, \$1.50

### END SICKNESS THIS NEW WAY

No medicine, drugs or dieting. Just a light, small, comfortable inexpensive Radio-Active Pad, worn on the back by day and over the stomach at night. Sold on free trial. You can be sure it is helping you before you buy it. Over 150,000 sold on this plan. Thousands have written us that it healed them of Neuritis, Rheumatism, High Blood Pressure, Constipation, Nervous Prostration, Heart, Lungs, Liver, Kidney and Bladder trouble, etc. No matter what you have tried, or what your trouble may be, try Deagen's Radio-Active Solar Pad at our risk. Write today for FREE Trial offer and descriptive literature. Radium Appliance Co., 115 Broadway Bldg., Los Angeles, Cal.

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**Horace F. Temple**  
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WEST CHESTER, PA.

## BETTER FLOORS

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DAIRIES—ICE CREAM and CANDY MFG PLANTS

PACKING HOUSES—BAKERIES—DYE HOUSES

HOTEL KITCHENS—AUTO SHOW ROOMS, Etc.

THIS BLOTTER IS SIZE OF TILE. COLOR—RED QUARRY TILE

INSTALLED AND DISTRIBUTED BY

DREHMANN PAVING AND CONSTRUCTION COMPANY

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PHILADELPHIA, PA.

### \$1,825,000 Paid to Farmers As Indemnity For Cattle

Over \$1,825,000 was paid by the State and Federal Governments to Pennsylvania farmers during 1928 as indemnity for cattle which reacted to the tuberculin test, according to the Bureau of Animal Industry, Pennsylvania Department of Agriculture. Approximately two-thirds of this amount was paid by the State.

During the year 670,853 cattle in 74,526 herds were tested and of this number 26,865 reacted to the test. On January 1 this year, all the cattle in 902 townships located in 58 counties had been tuberculin tested on an area basis. This is an increase of 722 townships in 45 counties during the last four years.

Bovine tuberculosis eradication work has made particularly rapid strides during the past four years. On January 1, 1929, there were 27,143 herds consisting of 238,983 cattle, or 17 per cent of the cattle population of the state, tested under either the individual or area plans. By January first, this year 123,103 herds consisting of 843,824 cattle, or 62 per cent of the entire cattle population, had been tested.

In 19 counties, bovine tuberculosis has been reduced to less than one-half of one per cent, and in six other counties all herds have been tested but the counties have not yet qualified as modified accredited. There are also 15 additional counties where the cattle are 75 to 100 per cent tested, and 10 where the cattle population is 50 to 75 per cent tested.

**In Wonderland**  
"Will you please drive off the track?" asked the motorman. The truck driver promptly pulled to one side.

"Thank you, ever so much," added the motorman, with a smile.  
"You're very welcome," responded the truck driver, "but you must pardon my seeming carelessness, I had no idea your car was so near."—Muskogee (Okla.) Daily Phoenix.

### Six Per Cent Less Winter Wheat Seeded

Acres of winter wheat planted this fall by farmers in Pennsylvania is six per cent less than the seeded area in the fall of 1927, according to the Pennsylvania Federal-State Crop Reporting Service. A decrease of only one per cent was indicated in the August intentions-to-plant, but dry weather in some sections, which made plowing difficult, together with the disappointing crop harvested this year caused further reduction. The acreage sown is estimated to be 1,137,000 acres compared with 1,210,000 acres sown in the fall of 1927, of which 1,101,000 acres remained to be harvested this year. Abandonment, due to winter killing, has usually not exceeded three per cent.

The condition of the 1928 wheat plantings on December 1 was reported as 90 per cent, three points below the condition of the plantings on December 1 a year ago. The average December 1 condition is 90 per cent.

Taking the entire country, winter wheat sown for next year's harvest is estimated at 43,228,000 acres, a decrease of 8.6 per cent from the revised estimate for the fall of 1927. The condition of winter wheat on December 1 is reported as 84.4 per cent compared with 86.0 per cent a year ago and 84.6 per cent, the ten-year average.

**SEED POTATOES**  
High Grade Stock  
Sir Walter Raleigh, Irish Cobbler, Russets, Carman No. 3, Co. Mountain, Gold Coin and Banner  
Prices Reasonable Circular Free  
THE KEYSTONE POTATO FARMS  
RICHFIELD, PA.

**CHICKS**  
S. C. White Leghorns..... Per 100 \$11.00  
Barred Rocks and Reds..... 15.00  
White Rocks..... 14.00  
Mixed..... 10.00  
My parent stock is selected and culled for heavy layers. E. B. Thompson and Parks Strain. All good chicks. 100% live delivered. Special Price on Larger Orders. Circular Free.  
JACOB NIEMOND  
Box M, McAllisterville, Penna.

### High Grade Dairy Cows

in HIGHTSTOWN, N. J.

We handle all kinds of cattle

Holsteins—Guernseys—Jerseys

A Specialty

All cows tuberculin tested and sold subject to a 60 or 90 day retest and fully guaranteed in every respect.

Free delivery any distance.

B. ZAITZ & SON

202 Mercer Street

Phone 72 Hightstown, N. J.

### Baby Chicks

100% Live Delivery Postage Prepaid  
Wh. and Br. Leghorns..... \$6.00 \$11.00 \$22.50  
Buff and Bl. Leghorns..... 6.00 11.00 22.50  
Anconas..... 6.00 11.00 22.50  
Barred Rocks..... 6.50 12.50 60.00  
Wh. and Buff Rocks..... 6.50 12.50 60.00  
SC and RC Reds..... 6.50 12.50 60.00  
SC Bl. Minorcas..... 6.50 12.50 60.00  
Wh. and SL Wyandottes..... 7.50 14.00 67.50  
Buff Orpingtons..... 7.50 14.00 67.50  
All absolutely first class purchased stock from culled flocks. Prompt shipments.  
JAMES A. KREJCI,  
9507 Meech Ave., Cleveland, Ohio

### CHERRY HILL CHICKS

S. C. W. Leghorns—Wyckoff Strain..... 100 \$12.00  
S. C. Everlay Brown Leghorns..... 12.00  
Barred Rocks—Wm. Nace's Select..... 14.00  
S. C. Rhode Island Reds..... 15.00  
Mixed or Broiler Chicks..... 8.00  
1/2c less in 500 lots, 1c less in 1,000 lots. 25 chicks add 2c. 50 chicks add 1c. Full count. 100% live arrival guaranteed. Parcel post prepaid. Bank reference. Order direct from this adv. or write for free circular.  
CHERRY HILL POULTRY FARM  
Wm. Nace, Prop. McAllisterville, Pa.

### TIMOTHY AND CLOVER \$4.90

per bu.  
BIG BARGAIN—Sample Free—SAVE MONEY  
Red Clover and Timothy mixed—Standard Grasses, unsurpassed for hay or pasture. Contains 12 to 15 per cent clover—ready to sow. Thoroughly re-cleaned, guaranteed and sold subject to your test and approval. A real bargain. Samples Free of Clover, Alfalfa, Sweet Clover, Timothy, all Field Seeds and special low prices with catalog.  
American Field Seed Co., Dept. M. P. R., Chicago, Illinois

### BABY CHICKS

Order now for March, April and May delivery.  
Rhode Island Red Chicks, 15 per 100; Barred Rocks, 15 per 100; White Leghorn Chicks, 12 per 100. Good straight stock, guaranteed delivery.  
Satterthwaite's Seed Store  
16 N. WARREN STREET  
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### WANTED

Reliable man to manage farm of 276 acres in Bucks County, Pennsylvania. Dairy of thirty cows. Married man preferred. Furnish good references or do not answer.  
Reply—C. W. P.  
c/o MILK PRODUCERS' REVIEW  
219 N. Broad St., Philadelphia, Pa.



## ANNOUNCING New De Laval Milkers

No matter if your herd be large or small, or your cows the world's finest, regardless of the quality of milk you produce, there is now a De Laval Milker to meet your milking needs more satisfactorily, efficiently and economically than can be done in any other way. Save time, milk your cows better and faster, produce more and cleaner milk, get more profit and pleasure with a De Laval Milker. Milk the modern way. De Laval Milkers are sold on such easy terms they pay for themselves while you are using them.



## New De Laval Magnetic Milker — the World's Best Milker

**T**HIS is the milker thousands of dairymen have been waiting for. It combines all the good features ever developed in De Laval Milkers, plus a simplicity of construction and installation, minimum power requirements, uniformity and perfection of milking, with reliability and dependability of operation never before approached. Again De Laval is first.

Extensive trials during the past three years in various parts of the country prove the Magnetic to be the world's best milker. Users are delighted with it—cows respond to it with fullest production.

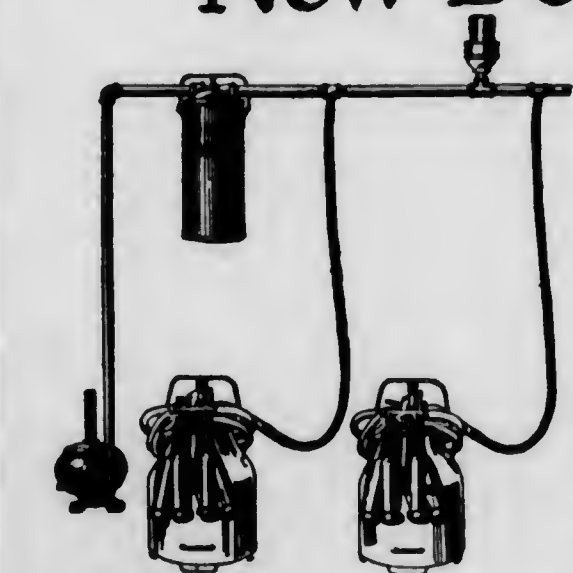
In the De Laval Magnetic, pulsations are controlled by means of a simple, efficient and patented application of electro-magnetic force, which is

created at the pulso-pump and transmitted by wire to the units. Not only is the famous De Laval principle of controlled and uniform pulsations retained, but it is accomplished with less power, less expense, less installation and greater reliability than was ever before possible. In the Magnetic, pulsation control is instantaneously uniform, simultaneous and perfectly balanced.

This means that with a De Laval Magnetic Milker every cow will be milked in the best possible way and in exactly the same manner at every milking, which is essential if cows are to produce to the fullest extent of their abilities. There are no adjustments for the operator to make—the entire outfit is simple and easy to handle.

The De Laval Magnetic will give the best milking in the least time, for the most years, with the greatest reliability, economy and satisfaction it is possible to obtain. Made in a variety of sizes for milking one to 1000 or more cows. Can be operated with gas engines or electric motors.

## New De Laval Utility Milker — For the Low Price Field



**T**HE development of the De Laval Utility Milker came about through the fact that many farmers and dairymen who had previously purchased other makes of milkers and who wished to secure a De Laval made milker without sacrificing all of their investment, inquired if De Laval Milker Units could be used with their installations.

A new type of pulsator was developed which could be attached to a De Laval Utility Unit, enabling it to work upon single pipe line milker installations in a very satisfactory manner.

Many of these Utility Units were put into operation and have proved so successful that it was decided to offer for sale a complete Utility Outfit. This milker will give better results than can be obtained from any other milker in its class. It is a quality milker in every respect and reaches a lower price field so that more users can enjoy the advantages of De Laval milking. Made in one and two unit sizes.

### Mail Coupon

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New York 165 Broadway Chicago 600 Jackson Blvd. San Francisco 61 Beale St.

Please send me complete information on the following (check which):

De Laval { Magnetic ☐ De Laval { Golden Series ☐  
Milkers { Utility ☐ Separators { Utility Series ☐  
Alpha Dairy Power Plant ☐

I milk.....cows.  
Name.....  
Town.....R.P.D.....State.....

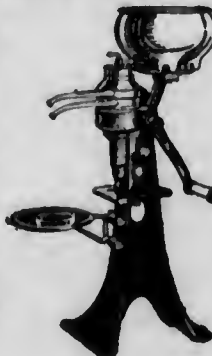
## Two Lines of De Laval Separators



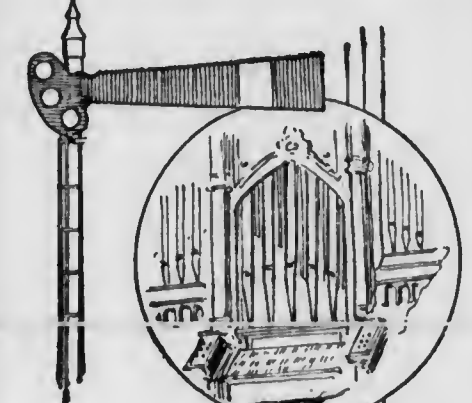
**T**HERE are now two lines of De Laval Separators for every need and purpose.

The De Laval Golden Series is the world's best separator and will continue to be the choice of all who want the best.

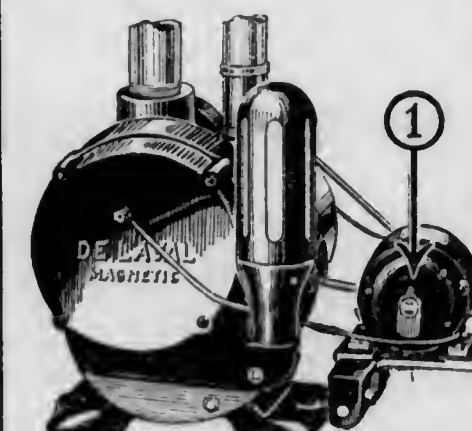
The De Laval Utility Series for a lower price field are ideal separators for all those who have always wanted De Laval but have thought they were beyond their means.



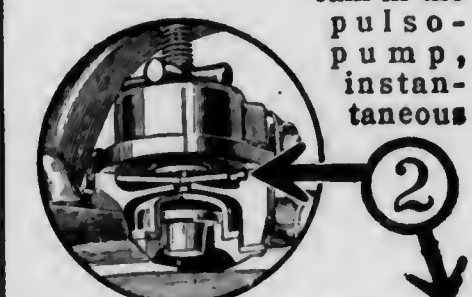
## Magnetic Force Lightning Fast— Reliable—Efficient



Through the use of the electro magnet railroad operate the complicated signal systems that assure the safe and swift operation of trains. In the wonderful pipe organs electro magnets control the hundreds of valves. In the telephone, the telephone, the steel and ore cranes—wherever positive control, lightning speed and dependability are needed, the electro magnet is used.



In the De Laval Magnetic Milker the use of magnetic force provides the simplest, most dependable and most effective pulsation control ever devised. The generator shown at (1) which is belted to the pulso-pump creates the magnetic force. When contact is made by a revolving cam in the pulso-pump, instantaneous



contact is made with a magnet in the tail top, which immediately exerts its force and lifts the metal disc shown at (2). This permits vacuum to suck back the piston in the pulsator and causes the front teat-cups to massage the cow's teats, while the two rear teat-cups are opened and milk is withdrawn. When contact of the revolving cam is broken the action is instantly reversed.

## New Alpha Dairy Power Plant

The new Alpha Vertical Dairy Power Plant for operating De Laval Milkers and Separators is built like an automobile engine. It has mechanically operated overhead valves, splash oiling system, roller bearing crankshaft.

**Heats water**  
For washing the milker while engine is being run.

# Milk Producers

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE IN

Vol. IX

West Chester, Pa., and Philadelphia, Pa.

No. 12

## Ninth Annual Dairy Council Advisory Board Holds Meeting

The Ninth Annual Meeting of the Advisory Council of the Philadelphia Inter-State Dairy Council was held at its offices in Philadelphia on March 28th.

This group comprised largely of authorities and educators in the territory in which the Council operates is presented each year with a general outline of the programs and problems in the development of health education work as practiced during the year.

The meetings were presided over by Dr. Clyde L. King, president of the Council, and a brief introduction to the program outlining some of the year's features was presented by Robert W. Balderston, executive secretary.

President King then read a letter from A. A. Cairns, Director of Public Health, Philadelphia, who regretted his inability to be at the meeting. Dr. Cairn's letter states in part:

"Were I to attend the meeting would say that it is my opinion that Philadelphia at the present time is receiving the best milk supply it has had for a number of years and I know these conditions are changing for the better every day. Nevertheless, I would like to see Philadelphia's entire milk supply from tuberculin tested herds, to see the sale of raw milk discontinued and to have all milk pasteurized."

Miss Dorothy Chandler, of the Dramatic Department of the Dairy Council and a group of children from the Packer Public School, Philadelphia, presented in costume, the new "Swiss Health Story." This little story with its free dramatics is being used in fifth and sixth grades and was particularly well received as an example of that class of health work.

Del Rose Macan, director of dramatics, briefly outlined the methods now generally adopted by the Council in presenting its program. Practically all the dramatic work is presented at a minimum of time.

from both the standpoint of the school and the dramatic department. The Swiss Health Story for instance, required but 40 minutes to one hour's time as the full time required for preparation by the school children.

### Dairy Council Exhibits

An opportunity was then given those attending the meeting to inspect samples of the newest developments in Dairy Council posters, demonstrations, etc. These included among others: The new Cafeteria Project; Window Exhibits, "The United States Dining Table." General Literature, Laboratory Developments in Connection with Bacteria Tests in Milk.

New Health Stories, New Nutritional Charts, New Milk Wagon Posters, Mechanical Display Devices, New Leaflets, "Tymauk, the Esquima Boy," and "Six

to Sixteen," and a presentation of the new Lenci Felt Posters, featuring the Eight Health Rules.

### Buffet Supper

A buffet supper was served in the offices of the Council, one hundred and twenty-four members of the Advisory Board, guests and members of the Council participating. The menu was prepared in the Dairy Council kitchen by members of the Nutrition Department. (The menu and methods of preparing the dishes are given on page 8 of this issue of the REVIEW).

for  
Strength



One of the Impressive New Series of Posters developed by the National Dairy Council for use on Milk Wagons and also in General Poster Exhibition

### Evening Session

The evening session opened with an address by Dr. C. W. Larson, managing director of the National Dairy Council. "The Dairy Council is having a tremendous influence not only in this country but throughout the world. The National Dairy Council now operates in 420 cities and towns in the United States. Among some of the newer units of the Council are those in Washington, D. C.; Birmingham, Ala.; Memphis, Tenn.; Milwaukee, Wis.; and the Twin Cities, Minneapolis and St. Paul, Minnesota."

"One million pieces of literature per month are being circulated by the National Dairy Council and its co-operating units. This is good for the industry but better for the health of our children. Consumption of dairy products are steadily increasing."

Dr. Larson also referred to the formation of an International Dairy Council, which would result in the interchange of Dairy Council ideas and methods throughout the world.

Miss Louise Everts, of the Dramatic Department outlined the development and growth of the Sant' Dramatic Clubs in High Schools. Six Sant' Clubs are now operating in six different High Schools.

The development of the Direct Microscopic Bacteria Count for the classification

(Continued on page 9)

## Move to Form National Chamber of Agricultural Cooperatives

A delegation of co-operative leaders heading farm business groups doing over a billion dollars worth of business annually for about one million individual farm families, have informed President Hoover at the White House of the launching of a movement to form a national overboard body to represent them in national matters wherein they have a common interest.

C. O. Moser, of Dallas, Texas, president of the American Cotton Growers' Ex-

sentatives of other co-operative groups and unanimous agreement was reached as to the plan that will be offered the various organizations for ratification.

Persons in attendance at the meeting expressed the belief that this is the most important and far-reaching movement to co-ordinate the business forces in agriculture, and that the new organization will have the support of practically every important commodity group in the United States.

There are approximately 12,000 individual co-operative associations doing business for about 2 million farm families, and it is estimated that before the end of the year 1 1/2 million of these farm families will be represented in the National Chamber of Agricultural Co-operatives.

Ratification of the articles of association will proceed rapidly during the Spring and Summer, and the Chamber will be formally launched at the meeting of the American Institute of Co-operation in Baton Rouge, La., which begins July 29. H. D. Allebach, president of the Inter-State Milk Producers' Association and F. P. Willets, one of the association's directors, represented the organization at this meeting.

Among other co-operatives represented was American Cotton Growers' Exchange, American Cran-

berry Exchange, Co-operative Grange League Federation, Dairymen's League Co-operative Assn., Eastern States Farmers' Exchange, Equity Grain Co., Georgia Cotton Growers' Assn., Kansas Co-operative Wheat Marketing Assn., Maryland State Dairymen's Assn., Nat'l Co-operative Milk Producers' Federation, Nat'l Farmers' Elevator Grain Co., Nat'l Live Stock Producers' Assn., Ohio Farmers' Co-operative Milk Producers' Assn., Nat'l Wool Marketing Council, Pacific Exchange Producers' Co-operative, Inc., South Carolina Cotton Growers' Co-operative Assn., Connecticut Milk Producers' Assn., New England Milk Producers' Assn., Michigan Milk Producers' Assn., National Cheese Producers' Federation, Maryland State Dairymen's Assn., Land O'Lakes Creameries, Inc., South Western Irrigation Cotton Growers' Association, Mississippi Farm Bureau Cotton Protective Federation; Nat'l Milk Producers' Federation, Farmers Grain Dealers of Illinois, Arkansas Pimacotton Growers, National Live Stock Producers' Assn., Ohio Wool Growers' Co-operative Assn., Texas Farm Bureau Cotton Assn., Louisiana Farm Bureau Cotton Growers' Co-operative Marketing Assn., Alabama Farm Bureau Cotton Assn.

change, acted as spokesman of the delegation.

The new agency will be known as the National Chamber of Agricultural Co-operatives. It will be organized on a divisional basis. For example, the livestock co-operatives will have one division; the dairy co-operatives another division; the cotton co-operatives another, etc. It was agreed that each division should have one vote irrespective to the number of co-operatives assigned to it, and that unanimous consent of the various divisions will be necessary for the name of the Chamber to be used with respect to any action affecting finance or public policy. The member associations of each division are to choose their directors in their own way and each division may have either one or three directors at the option of the members of the division.

The formation of this Chamber is the result of a movement which began more than a year ago and took definite form at the Berkeley, California meeting of the American Institute of Co-operation last summer when arrangements were made for a committee to study the problem and to devise a plan for setting up a conference board and protective body.

The Committee conferred with repre-



## ANNOUNCING New De Laval Milkers

No matter if your herd be large or small, or your cows the world's finest, regardless of the quality of milk you produce, there is now a De Laval Milker to meet your milking needs more satisfactorily, efficiently and economically than can be done in any other way. Save time, milk your cows better and faster, produce more and cleaner milk, get more profit and pleasure with a De Laval Milker. Milk the modern way. De Laval Milkers are sold on such easy terms they pay for themselves while you are using them.



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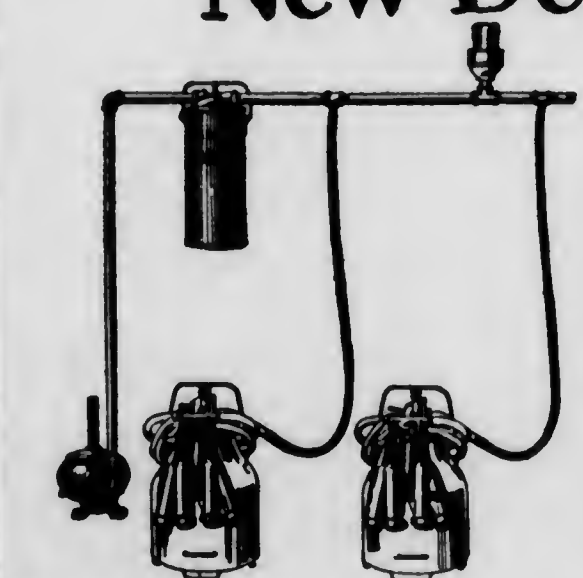
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### Mail Coupon

THE DE LAVAL SEPARATOR COMPANY, Dept. 9832  
New York 165 Broadway Chicago 600 Jackson Blvd. San Francisco 61 Beale St.

Please send me complete information on the following (check which):

De Laval Magnetic Milkers ☐ De Laval Utility Milkers ☐ De Laval Golden Series Separators ☐ De Laval Utility Series Separators ☐ Alpha Dairy Power Plant ☐

I milk \_\_\_\_\_ cows.

Name \_\_\_\_\_

Town \_\_\_\_\_ R.F.D. \_\_\_\_\_ State \_\_\_\_\_

## Two Lines of De Laval Separators



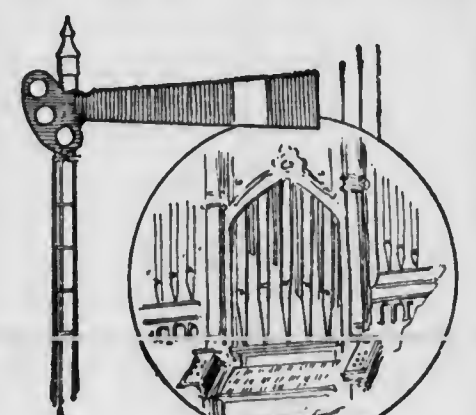
THERE are now two lines of De Laval Separators for every need and purpose.

The De Laval Golden Series is the world's best separator and will continue to be the choice of all who want the best.

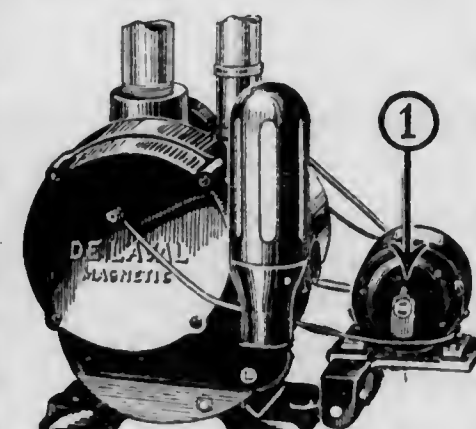
The De Laval Utility Series for a lower price field are ideal separators for all those who have always wanted De Laval but have thought they were beyond their means.



## Magnetic Force Lightning Fast— Reliable—Efficient



Through the use of the electro magnetic force, the complicated signal systems that assure the safe and swift operation of trains. In the wonderful pipe organs electro magnets control the hundreds of valves. In the telegraph, the telephone, the steel and ore cranes—wherever positive control, lightning speed and dependability are needed, the electro magnet is used.



In the De Laval Magnetic Milker the use of magnetic force provides the simplest, most dependable and most effective pulsation control ever devised. The generator shown at (1) which is belted to the pulso-pump creates the magnetic force. When contact is made by a revolving cam in the pulso-pump, instantaneous



contact is made with a magnet in the pullo-top, which immediately exerts its force and lifts the metal disc shown at (2). This permits vacuum to suck back the piston in the pulsator and causes the front teat-cups to massage the cow's teats, while the two rear teat-cups are opened and milk is withdrawn. When contact of the revolving cam is broken the action is instantly reversed.

## New Alpha Dairy Power Plant

The new Alpha Vertical Dairy Power Plant for operating De Laval Milkers and Separators is built like an automobile engine. It has mechanically operated overhead valves, splash oiling system, roller bearing crankshaft.

Heats water  
For washing the milker while engine is being run.

# Milk Producers

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE IN

Vol. IX

West Chester, Pa., and Philadelphia, Pa

No. 12

## Ninth Annual Dairy Council Advisory Board Holds Meeting

The Ninth Annual Meeting of the Advisory Council of the Philadelphia Inter-State Dairy Council was held at its offices in Philadelphia on March 28th.

This group comprised largely of authorities and educators in the territory in which the Council operates is presented each year with a general outline of the programs and problems in the development of health education work as practiced during the year.

The meetings were presided over by Dr. Clyde L. King, president of the Council, and a brief introduction to the program outlining some of the year's features was presented by Robert W. Balderston, executive secretary.

President King then read a letter from A. A. Cairns, Director of Public Health, Philadelphia, who regretted his inability to be at the meeting. Dr. Cairn's letter states in part:

"Were I to attend the meeting would say that it is my opinion that Philadelphia at the present time is receiving the best milk supply it has had for a number of years and I know these conditions are changing for the better every day. Nevertheless, I would like to see Philadelphia's entire milk supply from tuberculin tested herds, to see the sale of raw milk discontinued and to have all milk pasteurized."

Miss Dorothy Chandler, of the Dramatic Department of the Dairy Council and a group of children from the Packer Public School, Philadelphia, presented in costume, the new "Swiss Health Story." This little story with its free dramatics is being used in fifth and sixth grades and was particularly well received as an example of that class of health work.

Del Rose Macan, director of dramatics, briefly outlined the methods now generally adopted by the Council in presenting its program. Practically all the dramatic work is presented at a minimum of time.

From both the standpoint of the school and the dramatic department. The Swiss Health Story for instance, required but 40 minutes to one hour's time as the full time required for preparation by the school children.

### Dairy Council Exhibits

An opportunity was then given those attending the meeting to inspect samples of the newest developments in Dairy Council posters, demonstrations, etc. These included among others: The new Cafeteria Project; Window Exhibits, "The United States Dining Table," General Literature, Laboratory Developments in Connection with Bacteria Tests in Milk, New Health Stories, New Nutritional Charts, New Milk Wagon Posters, Mechanical Display Devices, New Leaflets, "Tymauk, the Esquima Boy," and "Six

to Sixteen," and a presentation of the new Lenci Felt Posters, featuring the Eight Health Rules.

### Buffet Supper

A buffet supper was served in the offices of the Council, one hundred and twenty-four members of the Advisory Board, guests and members of the Council participating. The menu was prepared in the Dairy Council kitchen by members of the Nutrition Department. (The menu and methods of preparing the dishes are given on page 8 of this issue of the REVIEW).

for  
Strength



One of the Impressive New Series of Posters developed by the National Dairy Council for use on Milk Wagons and also in General Poster Exhibition

### Evening Session

The evening session opened with an address by Dr. C. W. Larson, managing director of the National Dairy Council. "The Dairy Council is having a tremendous influence not only in this country but throughout the world. The National Dairy Council now operates in 420 cities and towns in the United States. Among some of the newer units of the Council are those in Washington, D. C.; Birmingham, Ala.; Memphis, Tenn.; Milwaukee, Wis.; and the Twin Cities, Minneapolis and St. Paul, Minnesota."

"One million pieces of literature per month are being circulated by the National Dairy Council and its co-operating units. This is good for the industry but better for the health of our children. Consumption of dairy products are steadily increasing."

Dr. Larson also referred to the formation of an International Dairy Council, which would result in the interchange of Dairy Council ideas and methods throughout the world.

Miss Louise Everts, of the Dramatic Department outlined the development and growth of the Santé Dramatic Clubs in High Schools. Six Santé Clubs are now operating in six different High Schools.

The development of the Direct Microscopic Bacteria Count for the classification

(Continued on page 9)

## Move to Form National Chamber of Agricultural Cooperatives

A delegation of co-operative leaders heading farm business groups doing over a billion dollars worth of business annually for about one million individual farm families, have informed President Hoover at the White House of the launching of a movement to form a national overhead body to represent them in national matters wherein they have a common interest.

C. O. Moser, of Dallas, Texas, president of the American Cotton Growers' Ex-

representatives of other co-operative groups and unanimous agreement was reached as to the plan that will be offered the various organizations for ratification.

Persons in attendance at the meeting expressed the belief that this is the most important and far-reaching movement to co-ordinate the business forces in agriculture, and that the new organization will have the support of practically every important commodity group in the United States.

There are approximately 12,000 individual co-operative associations doing business for about 2 million farm families, and it is estimated that before the end of the year 1 1/2 million of these farm families will be represented in the National Chamber of Agricultural Cooperatives.

Ratification of the articles of association will proceed rapidly during the Spring and Summer, and the Chamber will be formally launched at the meeting of the American Institute of Co-operation in Baton Rouge, La., which begins July 29. H. D. Allebach, president of the Inter-State Milk Producers' Association and F. P. Willets, one of the association's directors, represented the organization at this meeting.

Among other co-operatives represented was American Cotton Growers' Exchange, American Cran-

change, acted as spokesman of the delegation.

The new agency will be known as the National Chamber of Agricultural Cooperatives. It will be organized on a divisional basis. For example, the livestock co-operatives will have one division; the dairy co-operatives another division; the cotton co-operatives another, etc. It was agreed that each division should have one vote irrespective to the number of co-operatives assigned to it, and that unanimous consent of the various divisions will be necessary for the name of the Chamber to be used with respect to any action affecting finance or public policy. The member associations of each division are to choose their directors in their own way and each division may have either one or three directors at the option of the members of the division.

The formation of this Chamber is the result of a movement which began more than a year ago and took definite form at the Berkeley, California meeting of the American Institute of Co-operation last summer when arrangements were made for a committee to study the problem and to devise a plan for setting up a conference board and protective body.

The Committee conferred with repre-

berry Exchange, Co-operative Grange League Federation, Dairymen's League Co-operative Assn., Eastern States Farmers' Exchange, Equity Grain Co., Georgia Cotton Growers' Assn., Kansas Co-operative Wheat Marketing Assn., Maryland State Dairymen's Assn., Nat'l Co-operative Milk Producers' Federation, Nat'l Farmers' Elevator Grain Co., Nat'l Live Stock Producers' Assn., Ohio Farmers' Co-operative Milk Producers' Assn., Nat'l Wool Marketing Council, Pacific Exchange Producers' Co-operative, Inc., South Carolina Cotton Growers' Co-operative Assn., Connecticut Milk Producers' Assn., New England Milk Producers' Assn., Michigan Milk Producers' Assn., National Cheese Producers' Federation, Maryland State Dairymen's Assn., Land O'Lakes Creameries, Inc., South Western Irrigation Cotton Growers' Association, Mississippi Farm Bureau Cotton Protective Federation, Nat'l Milk Producers' Federation, Farmers Grain Dealers of Illinois, Arkansas Cotton Growers' Co-op. Assn., Arizona Pima cotton Growers, National Live Stock Producers' Assn., Ohio Wool Growers' Co-operative Assn., Texas Farm Bureau Cotton Assn., Louisiana Farm Bureau Cotton Growers' Co-operative Marketing Assn., Alabama Farm Bureau Cotton Assn.



## The Organized Farmer Seeks Tariff Protection

By J. O. EASTLACK, Statistician, Inter-State Milk Producers' Assn.

A revision of the Tariff Law of 1922 was promised during the presidential campaign of 1928. These campaign promises placed major emphasis upon the necessity of redrafting the sections of the old law affecting Agricultural products. Considerate need of revision of certain manufacturing schedules was also recognized. There have been many important changes in economic conditions since 1922, which in many cases have made the rates of duty on and the classification of imported products wholly inadequate during recent years to protect many American industries from increasing competition with foreign produced commodities.

A great amount of preliminary work has been done during the past three months looking toward a new tariff Bill. The Ways and Means Committee of the United States House of Representatives opened public hearings early in January. Many hundreds of American citizens appear before the Committee to present information supporting requests for additional Tariff protection for their individual industries. In a few cases manufacturers asked that duties on raw materials be decreased or that the products in which they were interested be placed on the free list in the new bill. On the whole, however, the requests of the witnesses were for higher tariffs.

Organized farmers joined this army of witnesses as never before in any tariff hearing. Representatives of practically every commodity cooperative appeared before the committee with definite requests for higher duties upon the products in which they were interested. The general farm organizations supplemented these requests with presentations supporting higher farm tariffs in general. There was practically unanimous agreement among farm organizations in these requests for higher agricultural tariffs.

Higher rates of duty were asked on imports of meat and meat animals, poultry products, grain, vegetables, fruits, casein and all dairy products, and a uniform rate of duty upon all the varied imports of vegetable, animal, and marine, fats, oils, greases and oil bearing raw materials. The National Cooperative Milk Producers' Federation, of which our own organization, The Inter-State is one of the larger member units, presented a consolidated brief asking higher duties on all dairy products. In addition, members of the Dairy Tariff Committee of the Federation personally appeared in support of these higher rates on each of the various dairy products.

The requested rates on dairy products are based on the relative butterfat and milk solids content of each of the dairy products. A rate of 45 per centum ad valorem was asked on butter and 40 per centum ad valorem on skim milk on the basis of present prices. This is equal to 15 cents per pound on butter and 2 cents per gallon on skim milk. The rates in the law of 1922 are 12 cents per pound on butter while the old law did not mention skim milk. The Tariff Committee of the Federation translated these rates into equivalent tariffs on all the other dairy products on the basis of butterfat and solids-not-fat contained in them. These rates are as follows:—

Dairy Product	Cents	Rate in Requested Act of 1922
Butter per pound.....	15	12
Milk per gallon.....	8	2 1/2
Cream per gallon.....	60	20
Evaporated milk per lb.....	3	1
Condensed milk per lb.....	4 1/2	1 1/2
Whole milk powder per lb.....	10	3
Skimmed milk powder per lb.....	14	7
American cheese per lb.....	8	5
Swiss cheese per lb.....	12	7 1/2
All other cheese per lb.....	15	5

(Continued on page 10)

## Practical Suggestions for Spring Milk Production

By H. D. ALLEBACH, President, Inter-State Milk Producers' Assn.

Late winter and early spring months present a difficult problem to the dairyman producing market milk. It is the season of the year when it is extremely difficult to maintain a satisfactory production per cow.

There are several reasons why production is hard to maintain in the late winter and early spring months. First, the cows are emerging from a long session of stable feeding. Second, the whole tone of the animals system seems to be somewhat depressed as a result of winter feeding. Third, it is the season of the year when the price of mill feeds are usually at the highest peak. Fourth, the most serious reason of all is the fact that it is a period when home grown roughage of good quality is most scarce.

The dairyman therefore, who desires to maintain his production, and to maintain the quality of his milk supply must be planning far in advance to take especially good care of his herd during the late winter and early spring months.

The most difficult problem he has to face in this connection is a suitable amount of high grade roughage. There is a strong temptation during the fall and early winter months to feed liberally of the best grade of roughage that is available, frequently resulting in shortages as spring appears. Definite plans should be made in the fall for a sufficient amount of such roughages as legume hay and silage, to last well on into the spring months. When legume hay and silage are not available in sufficient quantities to feed liberally throughout the entire winter and spring months, the feeding should be on a basis that would not exhaust the entire supply. Either the amount should be cut down in the early part of the winter so as to stretch the roughage over until good pasture season is arrived at—or the herd should be reduced to the point where there is sufficient roughage to last until the pasture season is firmly established.

The secret of successful production in the late winter and early spring months depends almost entirely upon good roughage.

Just as definite plans should be made for conserving the roughage so that it will last throughout the entire winter and well into the spring, so plans should be made to conserve the pasture to prolong it throughout the entire summer season. This can best be done by—first, planting a good type of pasture. Undoubtedly pastures can be greatly increased by the proper selection of pasture crops, such as sweet clover. Then too, pastures should have an opportunity to get a good start in the spring before the cattle are admitted to them. When cattle are turned on the pasture they should not be permitted to have access to the entire pasture—rather they should be confined to a portion of the pasture and when they have that portion eaten down, they should be moved to the remaining portion of the pasture, allowing the first used a chance to again establish itself.

A marked increase in the total amount of pasture can be obtained by alternating the cattle from one field to another, allowing the grass to get a good start before the cattle are put back upon it.

One of the serious mistakes that is frequently made in connection with spring feeding is that of turning the cows out too early to pasture. Pastures are eaten off short under this system before they get well established. It frequently happens that the early summer would bring a period of drought, and if the pastures have

been eaten off short in the early spring, nothing is available after a week or two of severe drought. This results in a marked decrease in the production of milk and even if roughage were available in either the form of silage or hay, there would still be a considerable decrease in milk production.

Pastures should therefore be used so as to provide continuous pasturing throughout the summer, just as roughage should be used to maintain a continuous supply throughout the winter months. Every effort should be made to avoid extravagances in the use of roughage throughout the fall months, and the extravagant use of pasture throughout the early spring months.

The practical solution to spring feeding may be summed up in a very short sentence. Provide sufficient good winter roughage to carry the herd over at least until the first of May. Permit the pasture to get well established before turning the cattle in. Alternate the pasturing of cattle from one field to another, permitting the pasture to pick up after it has been eaten down. Avoid pasturing sheep and horses on the pasture after the cattle have been on it. Sheep and horses eat the grass much closer than do dairy cows, and will crop a pasture so close that it is almost void of any green covering. This permits the sun to dry the pasture out so that not enough moisture is present to start the grass growing again.

Effective March 1st, the price of milk advanced in this territory 1/4 of a cent a quart, or about 11 or 12 cents per 100 pounds. This advance coming at a time when non-co-operating dealers are almost universally lowering their prices, must bring home to us the value of a liquid milk market. Very few farmers anywhere in the entire territory expected an increase in price March 1st. Why not take this additional money and put it into good alfalfa hay for the next two months? That will help the situation in the coming spring. Now is really the time to begin planning for 1930. It should be a part of every dairyman's program to grow enough feed during the coming summer to carry his dairy over next winter and well into the spring of 1930.

Let us bear in mind that we should only keep such a number of cows on our farms as can be provided with a liberal amount of roughage and pasture—bearing in mind that one good cow well fed will return more profit than two cows poorly fed.

## Pennsylvania Fifth In Number of Silos

Pennsylvania stands fifth among the states in the number of silos, according to statistics collected and compiled by A. L. Haecker, emeritus professor of dairy and animal husbandry at the University of Minnesota. There are 37,340 of the silage storehouses in the Keystone State.

Of the total number, 535,229, reported to Haecker, 113,300 are located in Wisconsin. New York has 56,682, Michigan 50,520, and Ohio 40,340. Other states having more than 10,000 silos are Minnesota with 36,294, Indiana 32,040, Iowa, 32,000, Illinois, 28,240, Kansas 14,540, and Missouri 12,024.

If you haven't already done so, look over your machinery and be sure that it is all in good repair. You're not nearly so busy now as you will be later. Keep repair parts on hand.

## Better Milk Production Banquet Sponsored by Rotary Club and Business Men Held in Centreville, Maryland

For the first time in the history of dairying on the Eastern Shore of Maryland the business men of Centreville, Md., through the sponsorship of the Rotary Club entertained at dinner the dairymen of that vicinity so that they might all become acquainted with the necessity of producing a quality product, one that would meet the consumer demand and also prove profitable to the producer.

### Better Milk Banquet

Over 200 guests participated in a Better Milk Banquet, held in the Armory Build-

ing, in Centreville, Md., on March 8th, 1929. J. William Keith, local director of the Inter-State Milk Producers' Association acted as toastmaster. He briefly outlined the necessity for every producer marketing milk to supply a product that would regularly meet the requirements of consumer demand.

John R. E. Turpin, the first speaker called upon made an appeal that Queen Anne County should become dairy-minded, that the dairymen and the business men alike should think in terms of the dairy industry. The dairy business

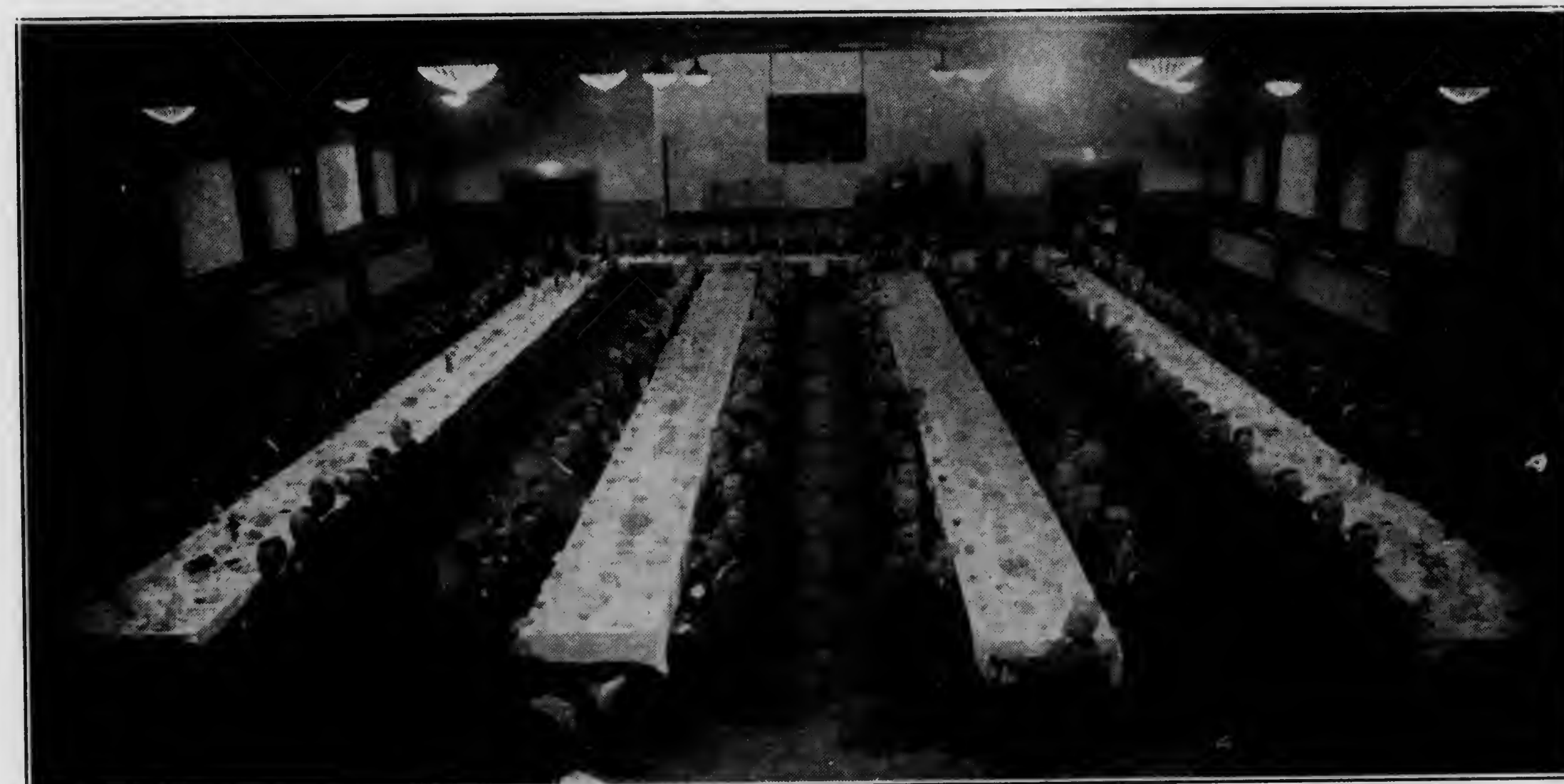
should be put on a sound economic basis. There should be plenty of feed for the cattle. Extraordinary care should be exercised during the garlic season and milk should be produced free from objectionable odors and flavors. Every effort should be made to produce a clean, sweet, sanitary product, one that will induce greater consumption on the part of the consumer.

Frank P. Willits, member of the Executive Committee of the Inter-State Milk Producers' Association and its former president, made a brief address, based upon his 44 years' experience as a practical dairyman.

Robt. J. Harbison, Jr., of Harbison's Dairies, operating the Centreville Receiving Station. He compared the milk business with that of the automobile business—The buyer of a motor car insists on high quality, efficiency and absolute confidence. The same factors

include such problems as regulatory measures and the eradication of tuberculosis.

T. B. Symons, Director of the Maryland Extension Service, spoke of the splendid possibilities of agriculture on the Eastern Shore of Maryland. He pointed out that only six out of ten cows at the Centreville Receiving Station were milking and that every effort should be made to keep the cows milking for a longer period. He stated that he believed that the co-operative organizations, such as the Inter-State Milk Producers' Association, the Maryland State Dairyman's Association and the Maryland and Virginia Producers' Association, were doing as



are paramount in the building of a successful dairy business.

The progress of the dairy industry in the past 40 years was the subject of an address by R. W. Balderston, Secretary of the Inter-State Milk Producers' Association. Three major problems have confronted the dairy farmer. First, those which he can quite largely solve himself, second, those which he can solve only co-operatively, such as those having to do with the marketing program and third, those that can only be solved by governmental regulations or support, these latter

John W. Smith, a well-known Sudlersville dairyman told how he produced quality milk in an efficient way in Queen Anne County. He made detailed suggestions for the production of high grade milk, including such items as proper cooling at

good a job for their members and the industry as anywhere in the world. He referred to the landlords and tenant system, a factor in the problem of good dairying on the Eastern Shore. He referred to the value of cow testing association work and he hoped that proper dairying methods would bring fertility to the soil and make agriculture on the Eastern Shore a safe and profitable business.

Addresses were also made by Ernest Grubbs, county agent, Edwin H. Brown, Jr., president of the Centreville Rotary Club and Senator Dudley G. Roe.

## Directors of Inter-State Hold Bi-Monthly Meeting

A regular bi-monthly meeting of the Board of Directors of the Inter-State Milk Producers' Association was held in the offices of the association in Philadelphia on March 12th and 13th, 1929, at which the following officers and directors were present:

H. D. Allebach, president; Frederick Shangle, vice president; Robert F. Brinton, treasurer; F. M. Twining, assistant treasurer; R. W. Balderston, secretary; I. R. Zellers, assistant secretary and the following directors: S. K. Andrews, J. H. Bennetch, Ira J. Book, E. H. Donovan, E. Nelson James, J. W. Keith, H. I. Lauver, S. Blaine Lehman, A. R. Marvel, I. V. Otto, J. A. Peorbaugh, C. F. Preston, Albert Sarig, John Carvel Sutton, C. C. Tallman, Harry B. Stewart, S. U. Trout-

man, Frank P. Willits and A. B. Waddington.

The minutes of the previous meeting of the board and of the meetings of the executive committee, since the last meeting of the board were presented and approved as was also the report of the treasurer covering receipts and expenditures since the last meeting.

F. M. Twining, in charge of Field Work reported on general field and testing work while secretary Balderston reported on the schedule of "A" milk prices under the recently approved "A" milk regulations.

The work of the Quality Control Department of the Dairy Council was reported upon by C. I. Cohee, while the general tariff situation was reported upon by J. O. Eastlack of the statistical department.

Formal reports of legislative bills of interest to the dairy industry in Pennsylvania, New Jersey, Maryland and Delaware were made by R. W. Balderston, Frederick Shangle, A. R. Marvel and E. H. Donovan.

President H. D. Allebach, made a brief report as to general market conditions. Market conditions on the whole have been favorable to the producer, in fact the market has been inclined toward a short supply since last fall but we did not feel justified in bargaining for an increase until about a month ago. In this we were successful in obtaining for our producers an average of 11 1/2 cents a hundred pounds or 1/4 cent per quart. This advance was based on higher costs of production during the months of March and April and will be based on a strict observance of the

Philadelphia Selling Plan.

Taken on the whole we believe that there is enough milk being produced but there is no doubt but that, during these two months, it will cost producers more money to produce a regular amount. Without doubt the usual surplus of milk will be in evidence again in May and June. Mr. Allebach briefly reviewed the markets in nearby territories, which for the most part are in good condition.

Territorial reports by the various directors of the association indicated a general shortage in forage crops. Higher costs of feeds were reported. In quite a number of territories the conditions were generally quiet. Taken on the whole most of the troubles have been minor ones and producers are generally well satisfied with the marketing conditions.



## INTER-STATE MILK PRODUCERS REVIEW

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Our readers should carefully consider the possibility of losses due to rejections of milk containing garlic or other off flavors usually prevalent at this season of the year.

To insure a maximum consumption on the part of the consumer, milk must be of high quality and must not contain undesirable flavors. Marketing milk of such a character checks consumption and frequently leads to a discontinuance of the continued daily use. Milk distributors have long realized this and in practically every case now refuse to accept milk that carries these undesirable flavors.

Producers can avoid these undesirable flavors. It may mean a little greater care, it may mean some changes in the feeding program or in milking methods, but it in the long run it means money in the producer's pocket. Milk rejected at the delivery point means a direct money loss—not only in the price of the milk itself, but it involves extra handling, extra haulage charges—and in addition to that a disgruntled producer when the milk comes back to the farm.

Grassy, garlic or off flavored milk can be avoided. If your fields are badly infested with garlic, keep your cows off such pastures. If you must turn cows on such pastures use precautionary measures. A good practice might be to start cattle on such fields for one hour only each day, that being directly after milking and then return them to the barn yard or pound. The pasture time can then be gradually increased as the fields become less prevalent with garlic.

If you wish to be more fully informed on this subject consult your county agent or write the U. S. Department of Agriculture for its booklet on the subject of garlic flavor prevention.

Buyers of milk for distribution in our cities will not accept milk that has a grass or garlic flavor and they are preparing to make a rigid inspection to exclude such milk from their receiving stations and shipping platforms.

At the Annual Meeting of the Inter-State Milk Producers Ass'n., held in December, 1919, the so-called "basic and surplus plan" was put into operation. The purpose of this plan has been to influence the dairy farmers to produce milk in accordance with the needs of the market. In the Philadelphia Milk Market the results of the use of this plan have been extremely satisfactory, both to producer and distributor in keeping the surplus in accordance with the demand from month to month.

The recent advance in the price of milk to the farmer with no increase to

the consumer was made possible by the fact that our producers are keeping their production so closely in line with what we require for consumption.

The whole country is now discussing the problem of what to do for agricultural relief, with particular reference to the handling of surplus of stable farm products. It is interesting in this connection to note what that metropolitan daily, the Philadelphia Inquirer, has to say on this subject.

"In Washington committees of Congress are laboring over agricultural relief plans. What to do with over-production—with the surplus of farm products? That is the big question.

The same problem has arisen in the oil fields. The output is too great. Losses are sustained. Something has to be done about it. And so the petroleum leaders have got together and agreed upon a plan—details still to be perfected—for restriction.

"That is the sensible thing to do. It is the only thing to do. It prevents gluts. It places the industry on a surer foundation.

"The troubles which the oil men have been encountering are duplicated by the Western farmers of the wheat and corn belts. They raise more than they can profitably sell, hence the various schemes to put the Government into business. But there won't be any Government purchases or any price-fixing by it. Nor will the unconstitutional equalization fee enter into whatever legislation is adopted. Co-operative marketing, yes, with Government loans. But in spite of all that may be done, as long as there is a big surplus there can be no satisfactory result.

"This is an outstanding evil that must be met, and restriction is the answer. What the oil men are doing the farmers should do. This phase of the situation should receive the careful attention of the agricultural committees of Congress."

### What Happened to the Butter Fat

Every now and then we hear of unusually low butterfat tests in the milk of some of our members. Every now and then we carry out a series of check tests for some one of our members. Usually we locate the trouble, sometimes the farmer locates it himself.

A recent letter to one of the officers of the Inter-State Milk Producers' Association is self explanatory.

"I think I can account for my milk being low in fat. I just fired my hired man that I caught drinking cream."

Investigation, following the departure of the hired man, showed that the butterfat test in this farmer's milk increased from 3.05 to 3.75 per cent. and it did it over night.

### Jersey Cattle Club Meets in Bedford

The Bedford County, Pa., Jersey Cattle Club held an interesting meeting at Bedford, Pa., on March 6th. There was a representative attendance from all sections of the county and a number of new members were enrolled.

During the meeting addresses were made by Prof. S. J. Brownell, Penn State College, and by Lynn Copeland and Robert W. Eno, of the American Jersey Cattle Club, New York City.

The following officers and directors of the club were elected to serve for the ensuing year: President, Allen R. Eshelman; Vice President, Lloyd H. Diehl; Secretary and Treasurer, Charles E. Koontz. Directors: Fred W. Cox, E. B. Ferry, John S. Herchberger, Stanley A. Koontz, Samuel Lee, Russell Winegardner and George Zembower.

## Market Conditions

H. D. ALLEBACH

The recent increase of 11½ cents per hundred pounds has not increased our milk production more than we expected for the month of March. We find that our market is still in good shape, our dealers are not carrying much surplus basic milk, but some of them are manufacturing some milk now, which of course is being bought at surplus prices.

You will remember that this increase of 11½ cents in price will be continued during the month of April.

### "A" Milk Prices

Although we used several pages in the last issue of our REVIEW to carry the price of "A" milk, apparently there are still quite a few producers who do not understand the new regulations. Of course this is to be expected and we are ready and willing to go anywhere and explain the new standards for "A" milk.

If there is anyone who does not understand the definition and he will write to this office, we will try to explain it. Our producers have now had one payment on the new "A" milk plan, apparently it has been quite satisfactory and we have had very few complaints. We are carrying on page 5 in this issue of the REVIEW an outline of the "A" milk prices in the different mile zones and by it we hope every producer of this grade of milk will be able to check on his payments.

### March Milk Prices

Quotations for fluid milk show an advance of practically 11½ cents over those for the month of February. Milk shipped to co-operating buyers during March, under the Philadelphia Selling Plan, will be paid for on the following basis:

Grade B Market Milk, three per cent butterfat content (basic quantity average) delivered f. o. b. Philadelphia, during March is quoted at \$3.41 per hundred pounds, or 7.35 cents per quart.

The price of Grade B Market Milk (basic quantity average), three per cent butterfat content, delivered at receiving stations in the 51-60 mile zone, during March, is quoted at \$2.83 per hundred pounds.

The usual butterfat differentials and prices for "A" milk in the different mileage

zones in the territory and at "A" stations are quoted on page 5 of this issue of the Milk Producers' Review.

### Surplus Milk Prices

The price of Class I surplus milk for March, three per cent butterfat content, delivered f. o. b. Philadelphia is quoted at \$2.49 per hundred pounds or 5.35 per quart. The price of Class I surplus, at all receiving stations, is \$1.91 per hundred pounds.

The price of Class II Surplus milk, 3 per cent butterfat content, for March, f. o. b. Philadelphia is \$2.10 per hundred pounds or 4.5 cents per quart. The price of Class II milk at all receiving stations, is \$1.52 per hundred pounds.

### March Butter Market

The winter season has almost come to a close. It is usually expected that the March and April markets will be more or less sensitive, more or less irregular and that in general price tendencies will be downward.

For the country as a whole butter production is estimated to have been slightly higher in January and in February, than in last year.

Unusually light stocks of butter in cold storage and a fairly active trade demand were factors which lent support to the butter market. Total U. S. Stocks on March 1st of approximately 12,000,000 pounds was not only 2½ million pounds less than last year but was 5½ million pounds less than the March 1st average for the past five years. Further reductions since the first of March make present stocks of no importance whatever.

The trend of butter prices during March has been downward.

Quotations for 92 score solid packed butter, New York City, opened the month at 51 cents, by mid-month it had declined to 48½. The market continued easy and at the close of the month prices had declined to 46 cents.

The average price of 92 score butter, solid pack, New York City, on which the surplus price for March was computed was .4882 cents, as compared to .4982 one month ago and .4968 the price quoted for 1928.

### Report of the Field and Test Department Inter-State Milk Producers' Association.

The following statistics show the aggregate operations of all the Inter-State Milk Producers' Association field men in connection with testing, weighing and general membership work, for the month of February, 1929

No. Tests Made.....	7178
No. Plants Investigated	63
No. Membership Calls..	260
No. New Members	
Signed.....	82
No. Cows Signed.....	561
No. Transfers Made....	11
No. Meetings Attended.	29
No. Attending Meetings	5785

### Good Hay Valuable

Roughages are usually the cheapest part of the dairy ration, but their value is very largely dependent on quality. Early cut, well-cured hay is vastly better than over-ripe, poorly cured hay. The proper grain mixture is determined by quality as well as kind of hay and other roughages, say State College dairy specialists.

### MARCH BUTTER PRICES

	Philadelphia	New York	Chicago
1	51½	51	49½
2	51½	51	49½
3	51½	51	49½
4	51½	51	49½
5	51½	51	49½
6	51½	51	49½
7	50½	50	49½
8	50½	50	49
9	50½	50	49½
10	50½	50	49½
11	50	49½	49½
12	49	48½	49
13	49½	48½	48
14	49	48½	48
15	49	48½	48
16	48½	47½	48½
17	49	48	48
18	48	47½	48
19	48	47	46½
20	47½	46½	46½
21	48	47	46½
22	48	47	46
23	48	47	45½
24	48	47	45½
25	48	47½	46½
26	48½	46½	45½
27	48	46	45
28	47	46	44½
29	47	46	44½
30	47	46	44½

### INTER-STATE MILK PRODUCERS' ASSOCIATION.

RECEIVING STATION PRICES in effect March 1st, 1929.

Subject to change whenever warranted by market conditions.

These quotations are based on 3% butterfat milk with a differential of 4 cents for each tenth point and 2 cents for each half tenth point up or down, and are for all railroad points. (Inland stations carry differential subject to local arrangements.)

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(3) To the Philadelphia Inter-State Dairy Council 2¢ per hundred pounds (46½ quarts) of all milk bought from other producers at price listed hereon.

These funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stabilization of markets and for an educational campaign advertising the food value of dairy products.

Basic price March first.				February surplus price.			
Basic quantity							
Miles	Freight rate	Price	Class 1	Class 1	Class 2	Class 2	Class 2
	per 100#	3% milk	Test	Per 100#	Test	Per 100#	Test
1 to 10	inc.	.268	\$2.91	3.	\$1.96	3.	\$1.56
11 to 20	"	.263	2.89	3.05	1.98	3.05	1.58
21 to 30	"	.303	2.87	3.1	2.00	3.1	1.60
31 to 40	"	.313	2.86	3.15	2.02	3.15	1.62
41 to 50	"	.333	2.84	3.2	2.04	3.2	1.64
51 to 60	"	.343	2.83	3.25	2.06	3.25	1.66
61 to 70	"	.364	2.81	3.3	2.08	3.3	1.68
71 to 80	"	.374	2.80	3.35	2.10	3.35	1.70
81 to 90	"	.389	2.78	3.4	2.12	3.4	1.72
91 to 100	"	.399	2.77	3.45	2.14	3.45	1.74
101 to 110	"	.414	2.76	3.5	2.16	3.5	1.76
111 to 120	"	.424	2.75	3.55	2.18	3.55	1.78
121 to 130	"	.434	2.74	3.6	2.20	3.6	1.80
131 to 140	"	.450	2.72	3.65	2.22	3.65	1.82
141 to 150	"	.460	2.71	3.7	2.24	3.7	1.84
151 to 160	"	.475	2.70	3.75	2.26	3.75	1.86
161 to 170	"	.480	2.69	3.8	2.28	3.8	1.88
171 to 180	"	.490	2.68	3.85	2.30	3.85	1.90
181 to 190	"	.505	2.67	3.9	2.32	3.9	1.92
191 to 200	"	.510	2.66	3.95	2.34	3.95	1.94
201 to 210	"	.520	2.65	4.	2.36	4.	1.96
211 to 220	"	.535	2.64	4.05	2.38	4.05	1.98
221 to 230	"	.540	2.63	4.1	2.40	4.1	2.00
231 to 240	"	.550	2.62	4.15	2.42	4.15	2.02
241 to 250	"	.556	2.62	4.2	2.44	4.2	2.04
251 to 260	"	.566	2.61	4.25	2.46	4.25	2.06
261 to 270	"	.576	2.60	4.3	2.48	4.3	2.08
271 to 280	"	.581	2.59	4.35	2.50	4.35	2.10
281 to 290	"	.596	2.58	4.4	2.52	4.4	2.12
291 to 300	"	.600	2.57	4.45	2.54	4.45	2.14
				4.5	2.56	4.5	2.16
				4.55	2.58	4.55	2.18
				4.6	2.60	4.6	2.20
				4.65	2.62	4.65	2.22
				4.7	2.64	4.7	2.24
				4.75	2.66	4.75	2.26
				4.8	2.68	4.8	2.28
				4.85	2.70	4.85	2.30
				4.9	2.72	4.9	2.32
				4.95	2.74	4.95	2.34
				5.	2.76	5.	2.36

By order of the Board of Directors

Tenth Floor, Flint Bldg., H. D. Allebach, President.  
Philadelphia, Pa., R. D. Sabalerstein, Secretary.  
Issued February 28th, 1929.



INTER-STATE MILK PRODUCERS' ASSOCIATION  
PHILADELPHIA PRICES in effect March 1st, 1929.

Subject to change whenever warranted by market conditions.

These quotations are based on 3% butterfat milk and a differential of 4 cents for each tenth point and 2 cents for each half tenth point up or down.

This price list is issued with the understanding that it is net to producers and that all buyers using it as a basis of payment to producers shall in addition thereto make the following contributions and payments.

(1) To the Philadelphia Inter-State Dairy Council 2¢ per hundred pounds (46 $\frac{1}{2}$  quarts) of all milk bought from any producer at price listed hereon.

(2) To the Inter-State Milk Producers' Association 2¢ per hundred pounds (46 $\frac{1}{2}$  quarts) of all milk bought from members of said association.

(3) To the Philadelphia Inter-State Dairy Council 2¢ per hundred pounds (46 $\frac{1}{2}$  quarts) of all milk bought from other producers at price listed hereon.

The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stabilization of markets and for an educational campaign advertising the food value of dairy products.

Basic price March first.				February surplus price.			
Test	Basic	Price		Class 1		Class 2.	
per cent.	Quantity	per					
	per 100#	qt.	Per 100#	Per qt.	Per 100#	Per qt.	
3.	\$3.41	7.35	\$2.54	5.45	\$2.14	4.6	
3.05	3.43	7.35	2.56	5.5	2.16	4.65	
3.1	3.45	7.4	2.58	5.55	2.18	4.7	
3.15	3.47	7.45	2.60	5.6	2.20	4.7	
3.2	3.49	7.5	2.62	5.6	2.22	4.75	
3.25	3.51	7.55	2.64	5.65	2.24	4.8	
3.3	3.53	7.6	2.66	5.7	2.26	4.85	
3.35	3.55	7.65	2.68	5.75	2.28	4.9	
3.4	3.57	7.65	2.70	5.8	2.30	4.95	
3.45	3.59	7.7	2.72	5.85	2.32	5.	
3.5	3.61	7.75	2.74	5.9	2.34	5.	
3.55	3.63	7.8	2.76	5.9	2.36	5.05	
3.6	3.65	7.85	2.78	5.95	2.38	5.1	
3.65	3.67	7.9	2.80	6.	2.40	5.15	
3.7	3.69	7.95	2.82	6.05	2.42	5.2	
3.75	3.71	8.	2.84	6.1	2.44	5.25	
3.8	3.73	8.	2.86	6.15	2.46	5.3	
3.85	3.75	8.05	2.88	6.2	2.48	5.3	
3.9	3.77	8.1	2.90	6.25	2.50	5.35	
3.95	3.79	8.15	2.92	6.3	2.52	5.4	
4.	3.81	8.2	2.94	6.3	2.54	5.45	
4.05	3.83	8.25	2.96	6.35	2.56	5.5	
4.1	3.85	8.3	2.98	6.4	2.58	5.55	
4.15	3.87	8.3	3.00	6.45	2.60	5.6	
4.2	3.89	8.35	3.02	6.5	2.62	5.6	
4.25	3.91	8.4	3.04	6.55	2.64	5.65	
4.3	3.93	8.45	3.06	6.6	2.66	5.7	
4.35	3.95	8.5	3.08	6.6	2.68	5.75	
4.4	3.97	8.55	3.10	6.65	2.70	5.8	
4.45	3.99	8.6	3.12	6.7	2.72	5.85	
4.5	4.01	8.6	3.14	6.75	2.74	5.9	
4.55	4.03	8.65	3.16	6.8	2.76	5.9	
4.6	4.05	8.7	3.18	6.85	2.78	5.95	
4.65	4.07	8.75	3.20	6.9	2.80	6.	
4.7	4.09	8.8	3.22	6.9	2.82	6.05	
4.75	4.11	8.85	3.24	6.95	2.84	6.1	
4.8	4.13	8.9	3.26	7.	2.86	6.15	
4.85	4.15	8.9	3.28	7.05	2.88	6.2	
4.9	4.17	8.95	3.30	7.1	2.90	6.25	
4.95	4.19	9.	3.32	7.15	2.92	6.3	
5.	4.21	9.05	3.34	7.2	2.94	6.3	

By order of the Board of Directors

Tenth Floor, Flint Bldg.  
 Philadelphia, Pa.

Issued February 28th, 1929.

President.

Secretary.

*H. G. Allard* *Robert B. Sullivan*



INTER-STATE MILK PRODUCERS' ASSOCIATION  
PHILADELPHIA PRICES in effect April 1st, 1929.

Subject to change whenever warranted by market conditions.

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The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stabilization of markets and for an educational campaign advertising the food value of dairy products.

Test per cent.	Basic price April first			March surplus price.		
	Basic Quantity per 100#	Price per. qt.	Class 1 Per 100# Per qt.	Class 2. Per 100# Per qt.		
3.	\$3.41	7.35	2.49 5.35	2.10 4.5		
3.05	3.43	7.35	2.51 5.4	2.12 4.55		
3.1	3.45	7.4	2.53 5.45	2.14 4.6		
3.15	3.47	7.45	2.55 5.5	2.16 4.65		
3.2	3.49	7.5	2.57 5.5	2.18 4.7		
3.25	3.51	7.55	2.59 5.55	2.20 4.75		
3.3	3.53	7.6	2.61 5.6	2.22 4.75		
3.35	3.55	7.65	2.63 5.65	2.24 4.8		
3.4	3.57	7.65	2.65 5.7	2.26 4.85		
3.45	3.59	7.7	2.67 5.75	2.28 4.9		
3.5	3.61	7.75	2.69 5.8	2.30 4.95		
3.55	3.63	7.8	2.71 5.8	2.32 5.		
3.6	3.65	7.85	2.73 5.85	2.34 5.05		
3.65	3.67	7.9	2.75 5.9	2.36 5.05		
3.7	3.69	7.95	2.77 5.95	2.38 5.1		
3.75	3.71	8.	2.79 6.	2.40 5.15		
3.8	3.73	8.	2.81 6.05	2.42 5.2		
3.85	3.75	8.05	2.83 6.1	2.44 5.25		
3.9	3.77	8.1	2.85 6.1	2.46 5.3		
3.95	3.79	8.15	2.87 6.15	2.48 5.35		
4.	3.81	8.2	2.89 6.2	2.50 5.4		
4.05	3.83	8.25	2.91 6.25	2.52 5.4		
4.1	3.85	8.3	2.93 6.3	2.54 5.45		
4.15	3.87	8.3	2.95 6.35	2.56 5.5		
4.2	3.89	8.3 5	2.97 6.4	2.58 5.55		
4.25	3.91	8.4	2.99 6.4	2.60 5.6		
4.3	3.93	8.4 5	3.01 6.45	2.62 5.65		
4.35	3.95	8.5	3.03 6.5	2.64 5.7		
4.4	3.97	8.55	3.05 6.55	2.66 5.7		
4.45	3.99	8.6	3.07 6.6	2.68 5.75		
4.5	4.01	8.6	3.09 6.65	2.70 5.8		
4.55	4.03	8.65	3.11 6.7	2.72 5.85		
4.6	4.05	8.7	3.13 6.7	2.74 5.9		
4.65	4.07	8.75	3.15 6.75	2.76 5.95		
4.7	4.09	8.8	3.17 6.8	2.78 6.		
4.75	4.11	8.85	3.19 6.85	2.80 6.		
4.8	4.13	8.9	3.21 6.9	2.82 6.05		
4.85	4.15	8.9	3.23 6.95	2.84 6.1		
4.9	4.17	8.95	3.25 7.	2.86 6.15		
4.95	4.19	9.	3.27 7.05	2.88 6.2		
5.	4.21	9.05	3.29 7.05	2.90 6.25		

By order of the Board of Directors

Tenth Floor, Flint Bldg.,  
Philadelphia, Pa.  
Issued March 28th, 1929.

President Secretary.  
*H. D. Albrecht* *Robert J. Buelow*



# INTER-STATE MILK PRODUCERS' ASSOCIATION

RECEIVING STATION PRICES in effect April 1, 1929.

Subject to change whenever warranted by market conditions.

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The funds so derived are to be used by the recipients for improving standards of quality in production and distribution of milk in the Philadelphia Milk Shed; for improvement and stabilization of markets and for an educational campaign advertising the food value of dairy products.

Basic price April first		March surplus price.	
Miles	Freight rate	Price	Class 1
Basic quantity	per 100#	3% milk	Test Per 100#
Class 2.			Test Per 100#
1 to 10	inc.	.268	\$2.91
11 to 20	"	.283	2.80
21 to 30	"	.303	2.87
31 to 40	"	.313	2.86
41 to 50	"	.333	2.84
51 to 60	"	.343	2.83
61 to 70	"	.364	2.81
71 to 80	"	.374	2.80
81 to 90	"	.389	2.78
91 to 100	"	.399	2.77
101 to 110	"	.414	2.76
111 to 120	"	.424	2.75
121 to 130	"	.434	2.74
131 to 140	"	.450	2.72
141 to 150	"	.460	2.71
151 to 160	"	.475	2.70
161 to 170	"	.480	2.63
171 to 180	"	.490	2.68
181 to 190	"	.505	2.67
191 to 200	"	.510	2.66
201 to 210	"	.520	2.65
211 to 220	"	.535	2.64
221 to 230	"	.540	2.63
231 to 240	"	.550	2.62
241 to 250	"	.556	2.62
251 to 260	"	.566	2.61
261 to 270	"	.576	2.60
271 to 280	"	.581	2.59
281 to 290	"	.593	2.58
291 to 300	"	.600	2.57

By order of the Board of Directors.

Tenth Floor, Flint Bldg.,  
Philadelphia, Pa.  
Issued March 28th, 1929.

*H. O. Allibank*  
President.

*Robt. W. Belcher*  
Secretary.

April, 1929

## MILK PRODUCERS REVIEW

Page 5

### LATEST MARKET PRICES

The basic price, quoted below for March, 1929, is to be paid by co-operating dealers on the average basic quantity established by each producer. For all milk bought in excess of the basic amount, the surplus prices, quoted below for the month of March, 1929, are to be paid.

#### PHILADELPHIA SELLING PLAN

#### INTER-STATE MILK PRODUCERS' ASSOCIATION PRICES

This price list is issued with the understanding that it is net to the producers and that all buyers using it as a basis of payment to producers, shall in addition thereto make the following contributions and payments:

(1) To the Philadelphia Inter-State Dairy Council 2¢ per 100 pounds (46½ quarts) of all milk purchased from any producer at prices listed hereon.

(2) To the Inter-State Milk Producers' Association 2¢ per 100 pounds (46½ quarts) of all milk bought from members of said Association.

(3) To the Philadelphia Inter-State Dairy Council 2¢ per 100 pounds (46½ quarts) of all milk bought from other producers at prices listed hereon.

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BASIC PRICE		BASIC PRICE	
March, 1929		Country Receiving Stations	
F. O. B. Philadelphia		March, 1929	
Test Per Cent	Per 100 lbs.	Test Per Cent	Per 100 lbs.
3.05	3.45	3.05	3.45
3.1	3.47	3.1	3.47
3.15	3.49	3.15	3.49
3.2	3.51	3.2	3.51
3.25	3.53	3.25	3.53
3.3	3.55	3.3	3.55
3.35	3.57	3.35	3.57
3.4	3.59	3.4	3.59
3.45	3.61	3.45	3.61
3.5	3.63	3.5	3.63
3.55	3.65	3.55	3.65
3.6	3.67	3.6	3.67
3.65	3.69	3.65	3.69
3.7	3.71	3.7	3.71
3.75	3.73	3.75	3.73
3.8	3.75	3.8	3.75
3.85	3.77	3.85	3.77
3.9	3.79	3.9	3.79
3.95	3.81	3.95	3.81
4.0	3.83	4.0	3.83
4.05	3.85	4.05	3.85
4.1	3.87	4.1	3.87
4.15	3.89	4.15	3.89
4.2	3.91	4.2	3.91
4.25	3.93	4.25	3.93
4.3	3.95	4.3	3.95
4.35	3.97	4.35	3.97
4.4	3.99	4.4	3.99
4.45	4.01	4.45	4.01
4.5	4.03	4.5	4.03
4.55	4.05	4.55	4.05
4.6	4.07	4.6	4.07
4.65	4.09	4.65	4.09
4.7	4.11	4.7	4.11
4.75	4.13	4.75	4.13
4.8	4.15	4.8	4.15
4.85	4.17	4.85	4.17
4.9	4.19	4.9	4.19
4.95	4.21	4.95	4.21

When milk is not tested the price F. O. B. Philadelphia is 8.25 cents per quart.

MARCH SURPLUS PRICES		MARCH SURPLUS PRICES	
F. O. B. Philadelphia		F. O. B. Philadelphia	
Test Per Cent	Per 100 lbs.	Test Per Cent	Per 100 lbs.
3.05	3.45	3.05	3.45
3.1	3.47	3.1	3.47
3.15	3.49	3.15	3.49
3.2	3.51	3.2	3.51
3.25	3.53	3.25	3.53
3.3	3.55	3.3	3.55
3.35	3.57	3.35	3.57
3.4	3.59	3.4	3.59
3.45	3.61	3.45	3.61
3.5	3.63	3.5	3.63
3.55	3.65	3.55	3.65
3.6	3.67	3.6	3.67
3.65	3.69	3.65	3.69
3.7	3.71	3.7	3.71
3.75	3.73	3.75	3.73
3.8	3.75	3.8	3.75
3.85	3.77	3.85	3.77
3.9	3.79	3.9	3.79
3.95	3.81	3.95	3.81
4.0	3.83	4.0	3.83
4.05	3.85	4.05	3.85
4.1	3.87	4.1	3.87
4.15	3.89	4.15	3.89
4.2	3.91	4.2	3.91
4.25	3.93	4.25	3.93
4.3	3.95	4.3	3.95
4.35	3.97	4.35	3.97
4.4	3.99	4.4	3.99
4.45	4.01	4.45	4.01
4.5	4.03	4.5	4.03
4.55	4.05	4.55	4.05
4.6	4.07	4.6	4.07
4.65	4.09	4.65	4.09
4.7	4.11	4.7	4.11
4.75	4.13	4.75	4.13
4.8	4.15	4.8	4.15
4.85	4.17	4.85	4.17
4.9	4.19	4.9	4.19
4.95	4.21	4.95	4.21

MONTHLY BASIC PRICE OF GRADE B OR MARKET MILK		MONTHLY BASIC PRICE OF GRADE B OR MARKET MILK	
3 per cent butterfat content		3 per cent butterfat content	
F. O. B. Phila.		F. O. B. Phila.	
Test Per Cent	Per 100 lbs.	Test Per Cent	Per 100 lbs.
3.05	3.45	3.05	3.45
3.1	3.47	3.1	3.47
3.15	3.49	3.15	3.49
3.2	3.51	3.2	3.51
3.25	3.53	3.25	3.53
3.3	3.55	3.3	3.55
3.35	3.57	3.35	3.57
3.4	3.59	3.4	3.59
3.45	3.61	3.45	3.61
3.5	3.63	3.5	3.63
3.55	3.65	3.55	3.65
3.6	3.67	3.6	3.67
3.65	3.69	3.65	3.69
3.7	3.71	3.7	3.71
3.75	3.73	3.75	3.73
3.8	3.75	3.8	3.75
3.85	3.77	3.85	3.77
3.9	3.79	3.9	3.79
3.95	3.81	3.95	3.81
4.0	3.83	4.0	3.83
4.05	3.85	4.05	3.85
4.1	3.87	4.1	3.87
4.15	3.89	4.15	3.89
4.2	3.91	4.2	3.91
4.25	3.93	4.25	3.93
4.3	3.95	4.3	3.95
4.35	3.97	4.35	3.97
4.4	3.99	4.4	3.99
4.45	4.01	4.45	4.01
4.5	4.03	4.5	4.03
4.55	4.05	4.55	4.05
4.6	4.07	4.6	4.07
4.65	4.09	4.65	4.09
4.7	4.11	4.7	4.11
4.75	4.13	4.75	4.13
4.8	4.15	4.8	4.15
4.85	4.17	4.85	4.17
4.9	4.19	4.9	4.19
4.95	4.21	4.95	4.21

### March, 1929, Inter-State Prices at "A" Delivery Points

The price of "A" milk of any given butterfat content and bacteria count at any "A" milk delivery point may be ascertained by adding to the base price per 100 lbs. for 3.50% B. F. milk at that delivery point, as given in Table I, butterfat differentials and bacteria bonuses as indicated in Table II.

Table I Base Prices at "A" Milk Delivery Points

NAME OF DELIVERY POINT	Delivery Point Location in Mileage Zone from Phila.	Minimum Butterfat Test Requirement in Effect at Delivery Point	Base Price of 3.50% Milk per 100 lbs.
Phila. Terminal Market		Per Cent	
47th and Lancaster	F.O.B.	4.00	\$3.61
Boyertown	F.O.B.	4.00	3.61
31st and Chestnut	F.O.B.	4.00	3.61
Baldwin Dairies	F.O.B.	4.00	3.61
Breuninger-Dairies	F.O.B.	4.00	3.61
Other Terminal Markets			
Camden, N. J.	F.O.B.	4.00	3.61
Norristown, Pa.	F. O. B. less 9 cts.	4.00	3.52
Wilmington, Del.	F. O. B. less 10 cts.	4.00	3.51
Receiving Stations			
Anselma, Pa.	41 50	3.60	3.04
Bedford, Pa.	261 270	3.80	2.80
Boyertown, Pa.	51 60	3.60	3.03
Bridgeton, N. J.	31 40	3.70	3.06
Byers, Pa.	41 50	4.20	3.04
Curryville, Pa.	261 270	3.50	2.80
Goshen, Pa.	51 60	3.50	2.91*
Huntingdon, Pa.	201 210	3.70	2.85
Kelton, Pa.	51 60	3.50	3.03
Kimberton, Pa.	41 50	4.20	3.04
Landenberg, Pa.	41 50	3.60	3.04
Mercersburg, Pa.	181 190	3.80	2.87
Nassau, Del.	131 140	3.70	2.92
Oxford, Pa.	51 60	3.50	3.03
Palm, Pa.	51 60	3.60	3.03
Red Hill, Pa.	51 60	4.20	3.03
Ringoes, N. J.	31 40	4.20	3.06
Rushland, Pa.	31 40	4.20	3.04
Stockton, N. J.	41 50	3.50	3.04
Toughkenamon, Pa.	41 50	3.80	2.87
Waynesboro, Pa.	181 190	3.80	2.83
Williamsburg, Pa.	221 230	3.70	3.06
Yerkes, Pa.	31 40	3.60	3.04
Zieglerville, Pa.	41 50	3.60	3.04
1st Surplus Price	F. O. B. Phila.	4.00	2.69
2nd Surplus Price	F. O. B. Phila.	4.00	2.30
1st Surplus Price	F. O. B. All Rec. Sta.	A	2.11
2nd Surplus Price	F. O. B. All Rec. Sta.	A	1.72

\*Based on Oxford, Pa., less 12 cents per 100 lbs.  
A—Same Butterfat Minimum Requirement as in effect for Basic Milk at each Rec. Sta.

Table II—Total Butterfat and Bacteria Payments Above Base Price for "A" Milk.

Butterfat Test Per Cent	Premium for Butterfat Content Above 3.50%		Total combined payment for Butterfat differential and bacteria bonus above base price per 100 lbs. for 3.50% B. F. milk. (See note 2)				
	If Bacteria Premium is Made	If Bacteria Premium is not Made	CLASS OF BACTERIA REQUIREMENT (See note 1 for definition of each class of bacteria requirement)				
			I	II	III	IV	V
3.50	.00	.00	.40	.25	.25	.15	None
3.55	.03	.02	.43	.28	.28	.18	.02
3.60	.06	.04	.46	.31	.31	.21	.04
3.65	.09	.06	.49	.34	.34	.24	.06
3.70	.12	.08	.52	.37	.37	.27	.08
3.75	.15	.10	.55	.40	.40	.30	.10
3.80	.18	.12	.58	.43	.43	.33	.12
3.85	.21	.14	.61	.46	.46	.36	.14
3.90	.24	.16	.64	.49	.49	.39	.16
3.95	.27	.18	.67	.52	.52	.42	.18
4.00	.30	.20	.70	.55	.55	.45	.20
4.05	.33	.22	.73	.58	.58	.48	.22
4.10	.36	.24	.76	.61	.61	.51	.24
4.15	.39	.27	.79	.64	.64	.54	.26
4.20	.42	.28	.82	.67	.67	.57	.28
4.25	.45	.30	.85	.70	.70	.60	.30
4.30	.48	.32	.88	.73	.73	.63	.32
4.35	.51	.34	.91	.76	.76	.66	.34
4.40	.54	.36	.94	.79	.79	.69	.36
4.45	.57	.38	.97	.82	.82	.72	.38
4.50	.60	.40	1.00	.85	.85	.75	.40
4.55	.63	.42	1.04	.89	.89	.79	.42
4.60	.66	.44	1.08	.93	.93	.83	.44
4.65	.69	.46	1.12	.97	.97	.87	.46
4.70	.72	.48	1.16	1.01	1.01	.91	.48
4.75	.76	.50	1.20	1.05	1.05	.95	.50
4.80	.79	.52	1.24	1.09	1.09	.99	.52
4.85	.82	.54	1.28	1.13	1.13	1.03	.54
4.90	.85	.56	1.32	1.17	1.17	1.07	.56
4.95	.88	.58	1.36	1.21	1.21	1.11	.58
5.00	.90	.60	1.40	1.25	1.25	1.15	.60
5.05	.93	.62	1.44	1.29	1.29	1.19	.62
5.10	.96	.64	1.48	1.33	1.33	1.23	.64
5.15	.99	.66	1.52	1.37	1.37	1.27	.66
5.20	1.01	.68	1.56	1.41	1.41	1.31	.68
5.25	1.04	.70	1.60	1.45	1.45	1.35	.70
5.30	1.07	.72	1.64	1.49	1.49	1.39	.72
5.35	1.10	.74	1.68	1.53	1.53	1.43	.74
5.40	1.12	.76	1.72	1.57	1.57	1.47	.76
5.45	1.15	.78	1.76	1.61	1.61	1.51	.78
5.50	1.18	.80	1.80	1.65	1.65	1.55	.80
5.55	1.21	.82	1.84	1.69	1.69	1.59	.82
5.60	1.24	.84	1.88	1.73	1.73	1.63	.84
5.65	1.27	.86	1.92	1.77	1.77	1.67	.86
5.70	1.30	.88	1.96	1.81	1.81	1.71	.88
5.75	1.33	.90	2.00	1.85	1.85	1.75	.90
5.80	1.36	.92	2.04	1.89	1.89	1.79	.92
5.85	1.39	.94	2.08	1.93	1.93	1.83	.94
5.90	1.42	.96	2.12	1.97	1.97	1.87	.96
5.95	1.45	.98	2.16	2.01	2.01	1.91	.98
6.00	1.48	1.00	2.20	2.05	2.05	1.95	1.00



## West Chester Cow Testing Association Holds Annual Meeting

A record attendance was to be noted at the sixth annual meeting of the West Chester Cow Testing Association, held in that city on March 12th, 1929. Of particular interest was the fact that there was a large attendance of the dairymen's wives and families. The annual banquet was held at the Green Tree Inn, at which addresses were made by Prof. F. F. Lininger, Pennsylvania State College, who spoke on the topic, "Does the Butterfat Test Determine the Price of Milk?"

Prof. R. R. Welch, also of Penna. State College made an address on "Cow Testing Associations as an aid to Breeding," and Miss Helen Beverly of the Philadelphia Inter-State Dairy Council entertained with "The Path of the Gopatis."

William Vandergrift, county extension representative, and secretary-treasurer of the Association presented the following interesting facts: He said that the total number of pounds of milk produced was 4,218,426; total number of pounds of butterfat, 15,976.1; total value received, \$161,891.55; total cost of roughage, \$24,000; total cost of grain, \$27,000; total cost of feed, \$51,000. It was estimated that the members of the Association used 2200 tons of silage and 950 tons of hay.

The following outstanding facts in connection with the work of the year were also presented:

R. E. Sharpless had the high cow for the year, having one which produced 550.2 pounds of butterfat. Francis Forsythe, Chadds Ford, had the high herd in butterfat, averaging 352.0 pounds and M. L. Jones, Westtown, had the high milk herd, with an average of 9,445 pounds.

Six herds, with an average of five or more cows, exceeded an average of 300 pounds of butterfat. These are as follows:

Francis Forsythe, of Chadds Ford, average number of cows, 24.42; breed CG; pounds of milk, 7733; pounds of fat, 352.

William I. Reeves, of near West Chester, average number of cows, 14.53; breed CG; pounds of milk, 7230; pounds of fat, 345.4.

R. E. Sharpless, London Grove, average number of cows, 38.83; breed J; pounds of milk, 6810; pounds of fat, 344.

M. L. Jones, Westtown, average number of cows, 146.75; breed H; pounds of milk, 9445; pounds of fat, 314.1.

Garrett - Williams Lodge, Newtown Square, average number of cows, 18.83; breed, GH:GG; pounds of milk, 8683; pounds of fat, 313.8.

William B. Rhoads, Oakbourne, average number of cows, 20.08; breed, RH:GH; pounds of milk, 8870; pounds of fat, 304.4.

There were three cows in the Association which produced between 500 and 600 pounds of butterfat. There were 28 which produced between 400 and 500 pounds; 124 produced between 300 and 400 pounds of fat.

Thirty-one cows produced over 400 pounds of butterfat. The owners of these cows are as follows: R. E. Sharpless, London Grove, seven cows; M. L. Jones, Westtown, eight cows; Robert F. Brinton, West Chester, five cows; Delaware County Home, two cows; H. E. Jones, Jr., West Chester, R. D., two cows; Garrett-Williams Lodge, Newtown Square, one cow; William I. Reeves, of near West Chester, one cow, and Francis Forsythe, of Chadds Ford, five cows.

The following officers were elected to serve for the coming year: President, William B. Rhoads, West Chester, R. D.; Vice President, William Smedley, Lima, and Secretary-Treasurer, William Vandergrift, West Chester, Pa.

## New Bulletin on Milk Marketing

"The Basic Surplus Milk Marketing Plan," Bulletin No. 231, issued by the Agricultural Experiment Station, Pennsylvania State College, continues the study of milk marketing in that state, especially in the Philadelphia milk shed. A previous bulletin, No. 208, issued by the Experiment Station, on "Milk Marketing in Pennsylvania," dealt particularly with milk-marketing plans. It presented a picture of the plans of operation of the co-operative associations in Philadelphia and Pittsburgh, as well as in some outside markets, and dealt with some of the economic principles involved in fluid-milk marketing.

Bulletin 231 deals with the problem of adjustment of production in conformity with the basic-surplus plan in operation in the Philadelphia milk shed, so as to secure a more even production throughout the year. The survey goes considerably farther than the usual study of production-control plans. It presents data from individual producers who are operating under the plan, analyzes their methods of adjustments and points out the economic consequences of these adjustments. It attacks the problems from the farm management side as well and makes clear the fact that the amount of adjustment which any individual should make ought to depend on the economic organization of his farming operations. It points out that the amount of natural pasture on the farm has been one of the principal factors which prevented certain farmers from producing a greater proportion of their milk during the winter months.

The study shows that there has been no consistent procedure on the part of individuals within any particular area. It does show that many individuals have brought about an overadjustment which may not have been the most economical. The fact that individual producers have reacted differently has been one important reason why the Inter-State Milk Producers' Association was able to operate for some six years without modification of its plan of using the average of the three fall months of October, November and December, as the basic quantity employed in calculating prices during the following nine months. Had producers reacted as they did in sections devoted largely to grain or with little pasture, modification would have been necessary much sooner. As it was, the seasonal variation in 1925, was 31 per cent less than in 1921. The base period was modified in 1926.

The study also includes considerable data from cow-testing associations and from producers not operating under the basic-surplus plan. The question of the profitability of fall freshening cows is covered in considerable detail. The data show that fall-freshening cows invariably produced more pounds of milk per year than those freshening in the spring, though in all cases except one they received more feed. The writer of the bulletin infers that profit per cow on farms having a large amount of pasture, might be greater if these cows freshening in the spring, though specific evidence is not offered to substantiate it.

Adopt Regular Practice

Regularity in feeding dairy cattle is important. Cows are largely creatures of habit, so time and order of feeding should follow the same general routine daily. Make changes gradually and see that rations are always as nearly balanced as possible. It pays.

Make repairs in your farm machinery now so that you won't have to waste valuable time later on.

## Field Men Meet

In connection with the Directors' meeting of the Inter-State Milk Producers' Assn., fieldmen of that organization and also of the Philadelphia Inter-State Dairy Council were called in from the field for a session to discuss their work, with special reference to problems for the coming year.

The session concluded with an address by Dr. Lewis A. Klein, of the Veterinary School of the University of Pennsylvania, Philadelphia, who spoke on his observations of Undulant Fever and its connection with the milk supply. Abortion in dairy cattle was known 100 years ago. Fifty years ago it was recognized as infectious. In 1896, the bacteria organism was isolated. A similar organism is also found in hogs.

"When contagious abortion is found in a dairy herd the best thing to do is to get rid of the herd," said Dr. Klein. This however, may be an expensive method. It can be eradicated but usually requires a long time. The blood test, on the whole, is very reliable and frequent testing and eradication of effected animals before they become a money loss, was recommended.

N. S. Grubbs, of the Portland Cement Association, Philadelphia, made a brief address on the use of concrete in clean milk production. He referred to the various uses of concrete in barn and stable construction and the necessity of making the concrete mixture of proper consistency for effective and lasting strength, of the use of concrete with cork wood, under concrete and other materials.

Among the suggestions discussed by the different members of the group were: Better country meetings; and improved publicity; short-cut cow testing associations; Legislative programs in the various states which affect the dairy industry; the operations of the Phila. Selling Plan and of our "A" milk requirements; Milk drivers' schools; Direct bacteria count, etc.

## Inter-State Milk Producers' Association

Incorporated  
Flint Building, 219 N. Broad St.  
Philadelphia, Pa.

Representing over 21,000 Dairy Farmers in the Philadelphia Milk Shed.

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Uncle Ab says that love and reason are the best of companions although they don't always go together.

## Highways Now Designed for Safer and Speedier Travel

Newer designs in motor cars, busses, and trucks, together with the more liberal speed laws in the majority of States have presented new problems in highway construction for highway engineers to solve, according to the Bureau of Public Roads of the United States Department of Agriculture. The new vehicles demand that highways be designed for safer and speedier operation.

To meet this demand highway engineers today are planning roads with better grades and alignments than existed some 10 years ago. The roads have wider and smoother pavements and easier curves. The curves are super-elevated and widened. Roads are developed to afford greater sight distances on both horizontal and vertical curves. Guard rails are more substantial and better protection at railway crossings is provided.

Further demands are made upon the highway engineer today by the dawning appreciation of natural beauty on the part of the general public. Highways must not only be travelable, but they must also be pleasing to the eye. The engineer develops road locations so as to bring out the natural beauty of the locality. This is particularly noticeable in the new road locations developed by the engineers of the Bureau of Public Roads in the national parks and national forests.

They are making use of short tunnels and half-tunnel sections under picturesque overhangs; cliffs and along precipitous canyon walls. Formerly it was the custom to blast away these irreplaceable landmarks, destroying fine scenes and leaving ugly wounds which took years to heal.

Much can be done during the construction of highways to preserve and enhance their natural beauty, says the bureau, by intelligent clearing of the right of way so as to save desirable trees, by development of vistas of outstanding magnificence, and in building bridges and culverts to harmonize with the general character of the landscape. After the road is built much can be done by intelligent planting, with due care to avoid obstruction to view of intersecting roads, unnecessary interference with the cultivation of adjacent farm land, and use of plantings foreign to the natural character of the locality.

## Better Milk for Consumers

With an attendance of 200 dairymen representing 11 counties in Illinois and 5 in Missouri, the St. Louis Milk Producers' Co-operative Association, held its annual meeting at East St. Louis, Ill., on February 12, 1929. Among the resolutions presented by the committee and unanimously adopted were the following: (1) to obtain a closer working relation with the distributors of the association's milk; (2) to advertise the product of the association as other products are advertised; (3) to make a greater effort to give the consumer a higher quality of milk; (4) to work out a plan whereby the distributor pays the producer a differential for quality milk.

## Crowding Chicks Unprofitable

Disastrous results in the way of heavy losses to chicks are likely to follow when one overestimates brooder house capacity. It is a safe rule to allow a square foot of floor space to every three chicks. In fact, giving the chicks more room than this would be advantageous, especially in early season when chicks must be closely confined to the house.

## FIELD NOTES

The Cecil County Council, held its annual meeting and banquet on March 23rd, in the Calvert High School, Calvert, Md. Over 100 persons attended.

An outstanding address was made by Dean McCue of the Department of Agriculture, Delaware State College. The subject of his address, "The Changing Years," made comparisons with the farmer of fifty-years ago and the farmer of today. In the old days 75 per cent of our people were engaged in agriculture, which was then a self sustained industry. Now, less than 25 per cent are so engaged and we depend on all parts of the country for our agricultural products. We are not to be alarmed in the from farm to city drift, but we should encourage it where inefficient farmers are trying to make a living on submarginal or poor land.

In pointing forward to a better agriculture Dean McCue believed that the following general factors were a necessary program:

A study of tax relationship between rural and urban communities.

Most land under cultivation is unimproved, as such, and should be reforested, turned to pasture or recreation centers.

Expansion of land by irrigation and drainage should cease at once.

Industry should infiltrate into our less thickly populated or rural communities.

Farmers should produce more economically.

The drift of poor and inefficient farmers to the city should be encouraged where the individual can improve his economic position.

Co-operative effort should be encouraged. We need more progressive, more reliant, God-fearing race on our farms.

Dr. Symons, Agricultural Extension Department, Maryland State College, made an address on "The New Development of the Dairy Business," in which he declared that dairying is the largest agricultural industry in the country. It provides a year round income. The marketing system in Cecil County, Md., is the best. It is efficient and sound; and I believe the price of milk is right. He urged the dairymen "to raise their production per cow, to plant and feed more legume hay and to build more silos. Find the facts in your business, study them and last of all do not be afraid to face them."

(J.T.P.)

## Farm Livestock in New Jersey

Tractors are replacing horses on New Jersey farms and the number of horses in the state has decreased 4000 during the last two years, says the Bureau of Statistics of that state. However the number of mules remains unchanged from year to year while the number of milk cows has increased.

There were only 50,000 horses valued at \$5,720,000, on January 1, 1929, compared with 54,000 worth \$5,908,000 on January 1, 1927. There are 5,000 mules in the state valued at \$615,000.

The increase in the number of milk heifers from 12,000 in 1926 to 17,000 in 1929 indicates that the dairy industry in the state is growing. The value per head of milk cows is increasing rapidly from year to year, being \$95 per head and \$135 per head in 1929. The increased value per head must be attributed to the improvement in the quality of New Jersey State milk cows and that the farmers in this state realize that a good breed pays better than a poor one, so they eliminate low grade milk cows. The value of the 122,000 milk cows is estimated at \$16,470,000.

The number of all cattle in New Jersey is increasing, there being 154,000 head in 1926 compared with 163,000 head on January 1. The cattle is appraised at \$18,610,000.

(E.C.D.)

Plans have been completed and the work is now probably under way for a new receiving station at Martinsburg, W. Va. The plant will be built and operated by the Supplee-Wills-Jones Milk Co., of Philadelphia.

A movement is on foot to organize a Bull Association among the Mercersburg, Pa., producers, shipping to the Mercersburg receiving station. Report has it that this project is meeting with considerable favor.

(E.C.D.)

Everett, (Bedford County, Pa.) Local of the Inter-State Milk Producers' Association, held its spring meeting in Everett, Pa., on March 21st. Over 60 people were present.

John Husberger, delegate to the annual meeting of the Inter-State Milk Producers' Association, made an interesting report of the association's development and activities. Addresses were also made by S. U. Troutman, Inter-State Director from the Bedford County District and O. S. Havens, Inter-State Fieldman in the same territory. Their remarks referred largely to the recent advance in the price of milk and the new "A" milk definitions.

L. R. Mollenauer, county agent, made a brief address in which he referred to the value and service of the association to the milk producers in that section.

(O.S.H.)

Considerable interest is being developed in the Clover Creek Grange in Bedford County. Many of the milk producers in that section are members of the Grange.

Recently the ladies of the Grange presented, at one of its meetings, an interesting, entertaining program.

In the near future the men of the Grange are to present a similar program.

The programs will be judged by Kenzie Bagshaw and the losing group must provide a dinner for the winners.

(O.S.H.)

## Co-operatives in Big Business

Many farmer-owned and controlled co-operatives, says the United States Department of Agriculture, are now in the "big business" class.

The 12 associations affiliated with the National Livestock Producers' Association, Chicago, handled livestock to the value of \$138,000,000 in 1928.

The California Fruit Growers' Exchange, Los Angeles, sold citrus fruit for its 206 local units to the value of \$69,500,000 during the 12 months ending October 31, last.

The Dairymen's League Co-operative Association, New York, representing 71,000 dairymen, sold products valued at \$82,500,000 in the year ending March 31, 1928.

The 13 affiliated associations of the American Cotton Growers' Exchange, Dallas, Texas, had sales of \$70,900,000 for 1927-28.

Some other "big business" co-operatives and their sales are: Land O'Lakes Creameries (Inc.), Minneapolis, a federation of more than 400 creameries, about \$50,000,000; Central Co-operative Association, South St. Paul, selling plant for livestock shipping associations in five States, \$33,000,000; Inter-State Milk Producers' Assn., Phila., acting for 25,968 members, \$28,500,000; Washington Co-operative Egg and Poultry Association, Seattle, 8,133 members, approximately \$19,000,000; Staple Cotton Co-operative Association, Greenwood, Miss., \$16,800,000; Challenge Cream and Butter Association, Los Angeles, approximately \$16,000,000.

## Penn State Dean Sees Agricultural College Growth

In a comparison of the school of agriculture as he found it upon entering Penn State College, in 1887, and the present status of the school, Dean R. L. Watts reveals a record of extensive growth and progress.

In 1887 there were only four students taking work in agriculture; during the present year, there have been 559 registered in 4-year courses, 104 in 2-year course, 118 in the winter short courses, and 4 taking special work, or a total of 785.

Forty-two years ago there were six members of the agricultural faculty. Today there are 169 resident members, including extension specialists in agriculture, besides 65 county agents, 7 assistant county agents, and 43 home economics extension workers.

The Pennsylvania Agricultural Experiment Station and the Institute of Animal Nutrition occupy an important place in the national system of agricultural research, the dean states. The station was organized in 1887, and since then 232 bulletins have been published and distributed among farmers and others interested in the numerous investigations. At present there are 47 active projects, and new problems are constantly arising which demand consideration by the station staff.

From 1887 to 1907 the college did not attempt any organized extension service in agriculture. Members of the faculty, however, lectured at farmers' institutes. In 1912, county agents were placed in five stations. These were J. M. McKee, in Washington; R. B. Dunlap, in Blair; H. S. Adams, in Butler; C. G. McBride, in Mercer, and A. K. Rothenberger, in Montgomery. The Smith-Lever Act of Congress, approved in 1914, gave the needed incentive to extension work in agriculture and home economics.

## Eastern States Farmers' Exchange

## And Still No Let-Up

One might expect a let-up after 10 years of steady growth. During 1928 the farmers purchased \$10,327,000 worth of commodities through the Eastern States Farmers' Exchange. \$2,603,000 more than in 1927. The increase was substantial in every department of the co-operative purchasing organization.

Feed and grain tonnage increased 22.6% in 1928 over 1927, from 141,908 tons to 174,027 tons. This enormous volume of feed certainly gave farmers a chance to test its worth, and to shift to some other source of supply if that shift appeared to be a profitable proposition.

But instead of shifting, farmers purchased more feed through the Eastern States in January, 1929, than in any previous month in Exchange history, 17,086 tons, 6,000 tons more than in January, 1928. They actually ordered 709 carloads of feed and grain during the month of January, 151 more than during January of the previous year.

To the thinking farmer, this is convincing evidence that Eastern States co-operative feed buying service is making good for it must always be remembered that Eastern States commodities are distributed for cash and that the farmer who has cash to cover his current needs is the farmer who can buy where he pleases. The fact that he finds cash for current needs indicates that his business judgment is usually good.

## Where records are kept, Eastern States Feeds prove their worth.

No farmer is too small and none too large to benefit from Eastern States Service. If you also are thinking of trying the service which thousands are endorsing with their patronage, write the office for information.

## Eastern States Farmers' Exchange

A non-stock, non-profit organization, owned and controlled by the farmers it serves

HEADQUARTERS:  
SPRINGFIELD, MASSACHUSETTS





### Health Work in the League of Nations

The League of Nations works in many fields of which we are little aware. One of these departments is the Health Committee. The 29 members of this committee are appointed, not for national or political reasons, but because they are experts in some field of public health. The United States has 3 representatives, although not a member of the League.

Following the war the Committee turned its attention to restoring public health work in the older countries and initiating it in some of the newer ones. Then it was a question of bringing malaria under control after it had burst all the defences built against it and had spread far and wide.

The Committee has studied Sleeping Sickness in Equatorial Africa, finding that increased travel has helped to spread the disease.

Many requests for help and advice have come to the Committee from all over the world. Latin America asked for a Commission to help on many problems—leprosy and infant mortality among others.

Greece has asked help in the re-organization of public health work there. Dr. Haven Emerson of Boston has been sent to Greece to make a special study of this problem and to aid in the development of the new program.

Today the Health Committee is still working on malaria, but the discussions now have to do with more elaborate and expensive measures to rid a country of this scourge and they have to do with the world supply of quinine and whether it can not be increased by utilizing other substances than Peruvian bark.

But the most striking change this year was the new emphasis laid on rural health work and on popular health education.

### Education

A little three-year-old girl tries to sew dresses for her dolls. She takes a few stitches which are certainly far removed from works of art, and her mother comes to her and says, "Do you know, that is a very good beginning. Now, if you take a few more stitches like this" (showing the child), "then you will have a beautifully dressed doll!" Such a mother, by encouraging this child in its efforts, giving it new fields to conquer, appealing to the child's ability to do more, is preparing the way for a "talent." Contrast another mother whose three-year-old daughter makes the clumsy stitches in a doll's dress, and is met with, "For heaven's sake, don't bother with that needle! You'll only prick yourself! Little girls can't sew dolls' dresses!" In the first case the child is encouraged to find new combinations, new colors, new models, and develops its technique because its efforts are met by encouragement and applause. The second child loses all desire for activity in which its clumsiness is held up as a cause for shame and punishment. The first develops a talent. The second will complain all her life, "I have absolutely no talent for needlework!"—Dr. Alfred Adler in Harper's.

### The Child's Bill of Rights

The ideal to which we should strive is that there shall be no child in America:

That has not been born under proper conditions

That does not live in hygienic surroundings

That ever suffers from undernourishment

That does not have prompt and efficient medical attention and inspection

That does not receive primary instruction

in the elements of hygiene and good health

That has not the complete birthright of a sound mind in a sound body

That has not the encouragement to express in fullest measure the spirit within, which is the final endowment of every human being.

HERBERT HOOVER  
President

American Child Health Association

## The Spirit of Sport



Youth Is the Strength  
of America  
Make American Youth  
Strong

### Survey Shows Women Work Overtime Often Exceeding Law by 13 Hours

Although forty-eight hours per week is the greatest number which women employed in business or industry can work according to the labor laws of many states, the average home woman in small cities works fifty-one hours a week, according to a survey just reported by Miss Hildgard Kneeland of the Bureau of Home Economics at Washington.

Out of the two thousand homes surveyed, including both country and city, seven hundred fifty farm women who averaged sixty-three hours a week were found. This would be a nine-hour day for the full seven days in the week or estimating that Sunday would be considered a "day of rest," with four hours for the simple preparation for meals and washing up afterwards, would give nine hours and fifty minutes or practically ten hours for each of the other six days of the week.

This survey included no spectacular labor problems such as homes with eleven members in the family or places where

there is more than the ordinary amount of every-day work. The two thousand homes averaged four members to the family which would generally consist of father, mother and two children. In one-sixth of these homes the mother had no help from either older children or a maid.

It is quite obvious that the housekeeper who is also the homemaker needs the best of diet and good care in order to stand such a strenuous routine.

We cannot over-emphasize the importance to the health of the home as a whole of having the mother, who plans the meals, vigorous and liking good food just as the youngsters with the growing appetites. Only by such stoking of the furnaces of her body can she hope to encounter in a well-poised manner the many interruptions and constant demands of family life. The fact that her sleep is too often interrupted is another reason for the necessity of building good reserve with good food, since she may not have the refreshing, rebuilding service of eight hours of uninterrupted rest.

### Menu for Buffet Supper

A color scheme of yellow and lavender, blended with sunshine, greeted the Advisory Council as they came to the annual meeting of the Philadelphia Inter-State Dairy Council on March 28.

Although the meeting was held in the conference room, true housewifely system had had the tables and desks arranged before the guests arrived. The covers were simply two shades of yellow crepe paper with either a lavender candle or a bunch of lavender sweet peas on each table. When supper time arrived, the sunlight had gone, but the lighted candles gave an attractive touch to the room.

The menu called forth much appreciation from the guests; it is given here for our readers who want to try the dishes for a Grange or church supper or for general use in the home. The meal was well balanced, economical, and easily prepared.

TUNA FISH LOAF—TOMATO SAUCE  
BROCCOLI AU GRATIN FRESH BUTTERED PEAS  
MOLDED FRUIT SALAD  
WHIPPED CREAM DRESSING  
CHEESE  
BUTTERED ROLLS ICE CREAM & ANGEL CAKE  
MILK  
(Coffee for only those who had the habit)

#### Tuna Fish Loaf

1 small can tuna fish (7 oz.)  
1/2 cup soft bread crumbs  
1/2 cup chopped celery  
1 tbsp. lemon juice  
Jucie from small onion  
1 cup very thick white sauce  
Add the ingredients to thick white sauce and steam one-half hour in a well buttered and closely covered baking dish.

#### Broccoli Au Gratin

1 large head broccoli, or cauliflower  
2 cups medium white sauce  
1/4 lb. mild cheese  
Soak broccoli in cold water for 30 minutes. Wash in warm water once or twice. Shake from last water and place in tightly covered pan, being sure you have 1/4 inch of water in bottom of pan. Cook for 15 or 20 minutes, then cut in small pieces. (Use leaves and tender part of stalk.) Place the piece in a thick buttered baking dish. Add the medium sauce in which the cheese has been melted. Sprinkle buttered crumbs over the top and bake about 10 minutes.

#### Molded Fruit Salad

1 pkg. lemon jello 2 bananas  
1 grapefruit Juice from 1 lemon  
2 oranges Lettuce, endive or watercress

Dissolve contents of package in pint of boiling water. Peel oranges and grapefruit, separate sections removing membrane. Slice bananas and add lemon juice to prevent discoloring. Add these fruits to jello when it begins to thicken. Place in a mold until firm. Sometimes 2 cups of gingerale may be added instead of water to give a different flavor. A few pieces of preserved ginger should also be added in the latter case to make a good gingerale salad.

#### Whipped Cream Dressing

Whip 1/2 pint of heavy whipping cream fold in 2 tablespoons of any cooked dressing, and 2 tablespoons of sugar.

### Ninth Annual Dairy Council Advisory Board

(Continued from page 1)

and grading of fluid milk was described by Floyd R. Ealy of the Quality Control Department.

C. I. Cohee, director of the Quality Control Department, outlined the program of educating milk drivers in the production, preparation and value of milk as a food through "Milk Drivers' Schools," and introduced Prof. A. J. Churchill in charge of this project. Prof. Churchill briefly outlined the general scope of the program. There are now 14 Milk Driver Schools, of ten lessons, one each week now under way in the Philadelphia Milk Shed.

Frank B. Ewing of the Bell Telephone Company of Philadelphia, outlined the general health education program among their women employees. These include nutrition, diet, good living habits, etc., in which they operate 72 classes weekly. He complimented the Dairy Council and their representative, Miss Catherine Hanly for the exceptional work they had done to assist them in this work. Miss Hanly followed with a brief description of the character of the work done.

Clifford Goldsmith of the Dairy Council outlined the new school Cafeteria project, as developed at the Smedley Junior High School, Chester, Pa., which has served as the field of development for this class of health work. Evelyn B. Spooner, also of the Dairy Council, outlined the general features of the program.

Industrial Trips for Philadelphia School Children, was the subject of an interesting address by Dr. Edward E. Wildman, Department of Science Education, Philadelphia. Many groups of ninth grade students from the public schools have visited various milk distribution plants for the first time during the past year. Dr. Wildman evaluated such industrial trips on the part of science education in the public schools.

Violet L. Findlay, Supervisor of Nature Study, Wilmington, Del., Public Schools, expressed her appreciation of the co-operation of Dairy Council work in her Nature Study Program.

The meeting closed with a brief address by Dr. W. Carson Ryan, Jr., Department of Education, Swarthmore College, Swarthmore, Pa., who said in part:

"We have had some of the best new education here tonight. There are two things that could be said at this time. There are two big jobs in American education: (1) A quantity job. We are trying to furnish extended education to so many people. Now we have in school one-half of the sixteen year olds, one-third of the seventeen, one-fifth of the eighteen. Next year we will have at least two-thirds of the sixteen, one-half of the seventeen one-third of the eighteen. We are told that this can't be done. (2) If we are going to extend education or schooling to everybody as we intend to do, we have a terrific job to see that education is really worth something. We can't take something handed down to us, we have to tie it up with the realities of life. This means a real enlargement of education. This new content of education that we must have in elementary and secondary schools must be enlarged. The more schools tie up definitely with life of the community, the more likely the content will be realized."

The advisory Board of the Dairy Council, a majority of whom attended the meeting, is as follows:

Dr. Edwin W. Adams, Phila. Normal School.



## ORANGE CHECKER Cow Chow for Pasture Prosperity

There are no breaks in the Purina Plan. There's a Cow Chow to fit every need.

Green, Red, or Blue Checker for winter. Orange Checker Cow Chow for early green grass.

Give the pasture a good start before the cows get on it, and continue to feed your winter Cow Chow.

After the grass has a good start turn them on it a few hours at a time, and supplement it with Orange Checker. You will build

the cow's body during the period of grass stimulation, and in the short grass days to come when milk is scarce, you will be getting good fat checks for your milk and cream.

Give your Checkerboard feed dealer an estimate of your requirements, so that he will have your Pasture Cow Chow ready for you.

PURINA MILLS

854 Gratiot Street, St. Louis, Mo.

Sold at the stores with the checkerboard sign in the United States and Canada

PURINA CHOWS

cows—calves—hogs—steers



sheep—horses—poultry

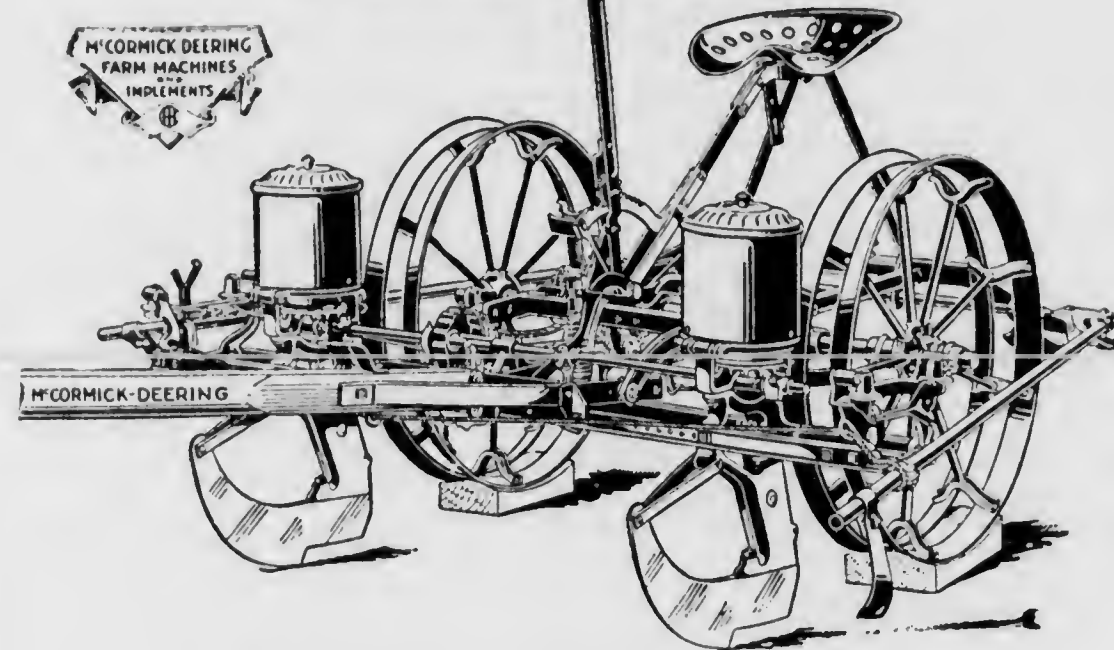
Dr. Theodore Appel, Secretary of Health, Commonwealth of Pennsylvania.  
Dr. A. A. Cairns, Director of Health, Philadelphia.  
Dr. Emily Bacon, Philadelphia, Pa.  
Madge T. Bogart, Home Economics Extension, Penna. State College.  
Dr. Henrietta Calvin, Philadelphia Public Schools.  
Dr. Oliver P. Comman, Assistant Superintendent, Public Instruction, Phila.  
A. J. Gerson, Associate Supt. of Public Instruction, Philadelphia.

Dr. Ralph D. Hietzel, Pres. Penn. State College.  
Dr. Clyde L. King, University of Penna.  
Dr. Wilmer Krusen, Pres. Phila. College of Pharmacy.  
Mrs. Wm. E. Lingelback, Phila. Board of Education.  
Mrs. S. Blair Luckie, Federation of Women's Clubs, Chester, Pa.  
Dr. E. V. McCollum, School of Hygiene, and Public Health, John Hopkins University, Baltimore, Md.

Dr. John H. Minnick, Dept. of Education, University of Pennsylvania.  
Anna B. Pratt, Director, White-Williams Foundation.  
Dr. Carson Ryan, Prof. of Education, Swarthmore College, Swarthmore, Pa.  
Mrs. George Wertsner, Vice President, Home and School League.  
Dr. Joseph Willits, Wharton School, University of Pennsylvania.  
Dr. Lucy Wilson, Supt. Girls' Southern High School, Phila., Pa.



## The Last Word in Planter Design



### McCormick-Deering Corn Planters

The McCormick-Deering Corn Planters combine old time-proved features with a simplified design which insures greater accuracy and a wider range of adaptability. It has taken a number of years to perfect this combination. The result is a series of planters which have no untried features, planters which are as nearly one hundred percent perfect as it is possible to make them.

Be sure to see these planters at your nearest dealer's.

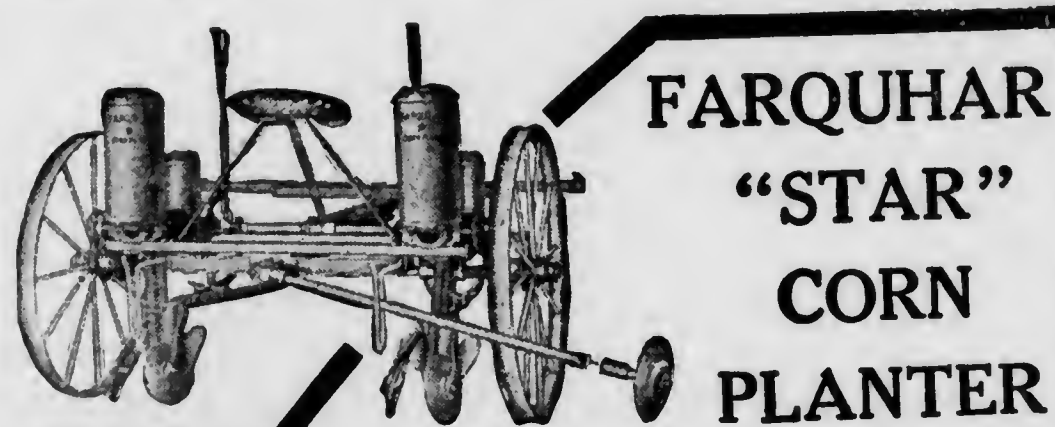
#### International Harvester Company

Incorporated

Baltimore

Harrisburg

Philadelphia



### FARQUHAR "STAR" CORN PLANTER

Puts the kernels of corn where you want the stalks to grow—on level ground or steep hillsides. Each row has separate adjustment as to depth of planting. Adjustable as to width between the rows.

Well adapted to all kinds of soil and very accurate on steep hillsides; for all kinds of grain—corn, beans, peas, beets.

Built with and without fertilizer sower. Double Discs, Runner or Shovel Openers and Disc or Scraper covers.

You can plant your corn exactly as you wish with a Star Two Row Planter—a positive drop and at any reasonable depth with light or medium covering. Write today for full description and learn how to produce the greatest corn crop.

Threshers  
Hay Balers  
Engines  
Boilers  
Cider Presses  
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Sawmills  
Traction Engines  
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Grain Drills  
Corn Planters  
Harrows  
Harrow-Rollers  
Shovel Plows  
Cultivators  
Weeders  
Corn Shellers  
Potato Diggers

**FARQUHAR** Box 761 • YORK, PA.

**Certified Seed Potatoes**

NORTHERN MICHIGAN RUSSETS—PRINCE EDWARD ISLAND COBBLERS AND MOUNTAINS—NEW YORK RUSSETS AND RURAL High-Yielding Strains—Officially Inspected and Certified. Car lots or Bag Lots.

Let us quote prices on your requirements of potatoes and other farm seeds.

K. C. LIVERMORE

Box M

HONEOYE FALLS, N. Y.



## The Organized Farmer Seeks Tariff Protection

(Continued from page 2)

every general farm organization, and the majority of producer's organizations actually engaged in the marketing of farm products and practically the entire organized fish industry, as well as many of the independent oil-crushing mills. The signers of the brief represent directly some 2½ million American families who are engaged in some form of oil or fat production.

The wide spread foundation of the annual production of oils and fats and greases is but little appreciated by American farmers. True, butterfat production is of such magnitude as to be a matter of common knowledge, while the same is true of Lard and Cottonseed oil. It is not necessary to more than mention linseed oil, Peanut oil, Soya Bean oil, Corn oil, Sperm oil, Cod and Cod liver oil, Olive oil, coconut oil, Palm oil, Sesame oil, and a host of others to show the extent of the problem and to indicate how seldom the problem as a whole is presented or considered.

The United States has about reached the stage where total fat production is balanced with fat consumption. On vegetable oils and fats the country is on a definitely net import basis. Because of this fact the organizations supporting the requests for higher duties on imports of oils and fats pointed out to the Ways and Means Committee the fact that the tide of imported oils which has been rising each year since about 1910 depresses domestic and fat prices to the level of the cheapest material obtainable in the surplus fat producing countries. In recent years, the great governor of oil and fat prices has been coconut oil imported duty free from the Philippine Islands. Imports of Coconut oil have expanded tremendously in the past decade. Because of the exemption of the Philippines from import duties, nearly all of this importation comes from this source.

In presenting the high points of the tariff problem on Fats and Oils to the Ways and Means Committee the representatives of these allied organizations stressed its importance because of the following reasons:

1. The farmers' price for oil bearing crops depends upon the price of the derived oil.
2. The oil problem affects almost the entire range of domestic farmers.
3. The producers of oil materials face the stiffest foreign competition of any domestic farm group.

An indication of the size of the fat and oil problem in United States is obtained by considering the annual production which is approximately 7½ billion pounds, of which 2 billion pounds is butter and 1½ billion pounds is lard. This production is annually supplemented by an additional 1¼ billion pounds of imported fats and oils. From this total supply the United States is in a position to and does export nearly a billion pounds. In other words production of fats and oils from domestic materials is just about equal to domestic consumption. Imported fats replace domestic fats which in turn, are forced into export markets. Another clear case in which this country imports its surplus. An adequate and reasonable tariff is the only means by which the situation can be corrected.

Our situation can be better illustrated by picturing what would happen if the United States were in a war crisis with transportation from the Orient (the source of most of the imported fats and oils)

conducted under terrific handicaps if at all.

Under such conditions the supply of coconut oil would be practically shut off. This would leave important deficits in the oleomargine and the soap-making industries, and also in the confectionery and baking trades. The confectionery and the baking trade needs could easily be met from the butterfat supply of the United States. Likewise, the dairy fats and the cattle fats could easily replace the lessened production of the oleomargine industry which might be entirely closed down. But assuming a continuation of the oleomargine industry, quantities of cotton oil now going into lard substitutes would be diverted back into the oleomargine industry in which it was once a principal ingredient and into the soap kettle. With the lard substitute business temporarily shut down, the public's requirements could be easily met by our exportable surplus of lard.

Additional vegetable fat needs would be met by speeding up the production of peanuts and soya beans by enhanced prices that would be offered to products. Under such a condition our country could be and would be completely self sufficient as to fats and oils.

As indicated earlier in this discussion, a wide range of substitution is possible among the various fats and oils. Because of this, the price of all the various oils are closely related. In tariff making, therefore, duties can not be considered oil by oil nor fat by fat. The interchangeability of the various oil and fats demands that the problems must be approached from the standpoint of the price and use relationships of the various materials in the entire fats and oils structure. Acting on this fact, the allied organizations requested that a uniform, co-ordinated and equalized ad valorem tariff rate of 45 per centum be assessed against all imports of extracted fats and oils and 40 per centum against all imports of oil bearing raw materials.

This request is being met by strong opposition from the industries that use these imported oils, especially the soap-making industry. The representatives of these industries asked that all imports of fats and oils come in free for their industries. They are apparently unwilling to bear their just share of insuring domestic markets for our home farm products. They are now flooding the countryside with propaganda against the organized farmer's request for tariff.

The conclusion is clear that the Congress of the United States, through effective, wise and co-ordinated tariff rates upon the oils, fats, and related raw materials, may place in the hands of farmers an opportunity to put into effect diversified cropping systems in harmony with a balance National Production. Such an action would afford us an opportunity to regain gradually the lost domestic market for fats and oils, an opportunity to develop further the production of fats and oils through shifting acreage from surplus crops to oil-bearing crops.

The new tariff bill will be presented to the special session of Congress recently called by the new President for April 15th. Sub-committees of the Ways and Means Committee are now whipping the mass of evidence presented by witnesses into shape and are re-drafting the various schedules of the Tariff Act of 1922. Will the Tariff Act of 1929 afford full protection to the domestic Agricultural Industry? The answer will be known soon after April 15.

## COW TESTING ASSOCIATIONS

### One Cow in Six Gives Over Half Ton of Milk

Every sixth cow in Pennsylvania testing associations gave more than 1000 pounds of milk in February and one cow in nine produced more than 40 pounds of butterfat. Fifty-nine associations reported the testing of 20,039 cows during the month, according to an announcement by the Pennsylvania State College dairy extension service.

In the 1000-pound group of cows 1489 gave more than 1200 pounds of milk, and 665 of the 40-pound fat producers passed the 50-pound mark. During the month 189 cows were found unprofitable and were sold to butchers.

The Wayne association tested the largest number of cows, 526, and the Chester Valley groups of Chester County was second with 521. Cumberland No. 1 had the largest number of 40-pound fat producers, 102, and the greatest number of 1000-pound milkers, 146. The Wayne association was second in number of 400-pound cows with 87, and Susquehanna No. 2 had the second largest number of 1000-pound milkers, 102.

A registered Holstein, owned by W. F. Bohlager, of the Canton association, had the highest individual production, with 2601 pounds of milk and 101.4 pounds of butterfat. A Lathrop Farm Holstein in the West Susquehanna No. 1 association was second, producing 2408 pounds of milk and 86.7 pounds of butterfat.

The highest 10-cow averages in butterfat were made in the Laurel Hill, West Susquehanna No. 2, and Wayne associations. The respective records were 83.1, 67.7, and 57.4 pounds.

### Northern York County

The Northern York County had 22 herds on test during February with 289 cows in milk and 44 dry. Thirty-nine cows produced over 40 pounds and 13 produced over 50 pounds of butterfat. Thirty-eight cows produced over 1000 pounds and 20 over 1200 pounds of milk.

#### TEN HIGHEST PRODUCING COWS IN BUTTERFAT FOR MONTH

Owner	Breed	Lbs. Milk	% Fat	Lbs. Fat
J. A. Poorbaugh	Cr.G.	896	7.1	63.6
Frank L. Krall	R.H.	2125	2.9	61.6
J. A. Poorbaugh	Cr.G.	1302	4.5	58.6
E. S. Gross	P.G.	1086	5.4	58.6
Frank L. Krall	R.H.	1697	3.4	57.7
Elmer Eichelberger	Cr.G.	1436	4.0	57.4
Frank L. Krall	R.H.	1585	3.5	55.5
C. B. Livingston	Cr.H.	1498	3.6	53.9
Frank L. Krall	R.H.	1610	3.3	53.1
Frank L. Krall	R.H.	1596	3.3	52.7

Average 1483 3.9 57.3

### Lehigh County Association

The Lehigh County Cow Testing Association finished its fifth year on March 1st, 1929, with fifteen whole year members. There were 324 cows in the Association during all or part of the year.

#### THE RESULT FOR THE FIVE YEAR'S TESTING IS AS FOLLOWS:

Year	Ave. No. Cows	Lbs. Milk	Lbs. Butterfat
1925	260.51	8159	274.5
1926	236.24	8056	271.8
1927	236.25	8623	292.4
1928	189.62	8708	302.8
1929	259.47	8140	279.3

#### THE RESULT FOR THE WHOLE YEAR MEMBERS IS AS FOLLOWS:

Ave. No. of cows in the Association	259.47
Ave. per cow: Lbs. of milk	8140
Lbs. of Butterfat	279.3
Percentage of Butterfat	3.4
Value of Product	\$306.02
Cost of Roughage including Pasture	55.10
Cost of grain	93.70
Total Cost of Feed	148.80
Value of Product above feed cost	157.22
Returns for \$1.00 expended for feed	1.83
Feed cost per 100 lbs. of milk	2.06
Feed cost per lbs. of Butterfat	.53

#### INDIVIDUAL HERD RECORDS

Five herds with an average of five or more cows exceeded an average production of 300 lbs. of butterfat. A complete list of these herds follows:

Owner's Name and Address	Ave. No. Cows	Breed	Lbs. Milk	Lbs. B'fat
Harold Ziegler, Westcoastville	8.83	R.H.	10,806	363.3
Allentown State Hosp., Allentown	48.08	R.&G.H.	10,457	335.6
Wm. H. Rupp, Breinigsville	12.00	R.H.	9,078	313.5
George Peters, Fogelsville	7.50	R.&G.H.	8,541	306.3
Gen. Harry C. Trexler, Allentown	8.25	R.&G.H.	6,221	303.7

### March, 1929, Inter-State Prices at "A" Delivery Points

(Continued from page 5)

Notes—

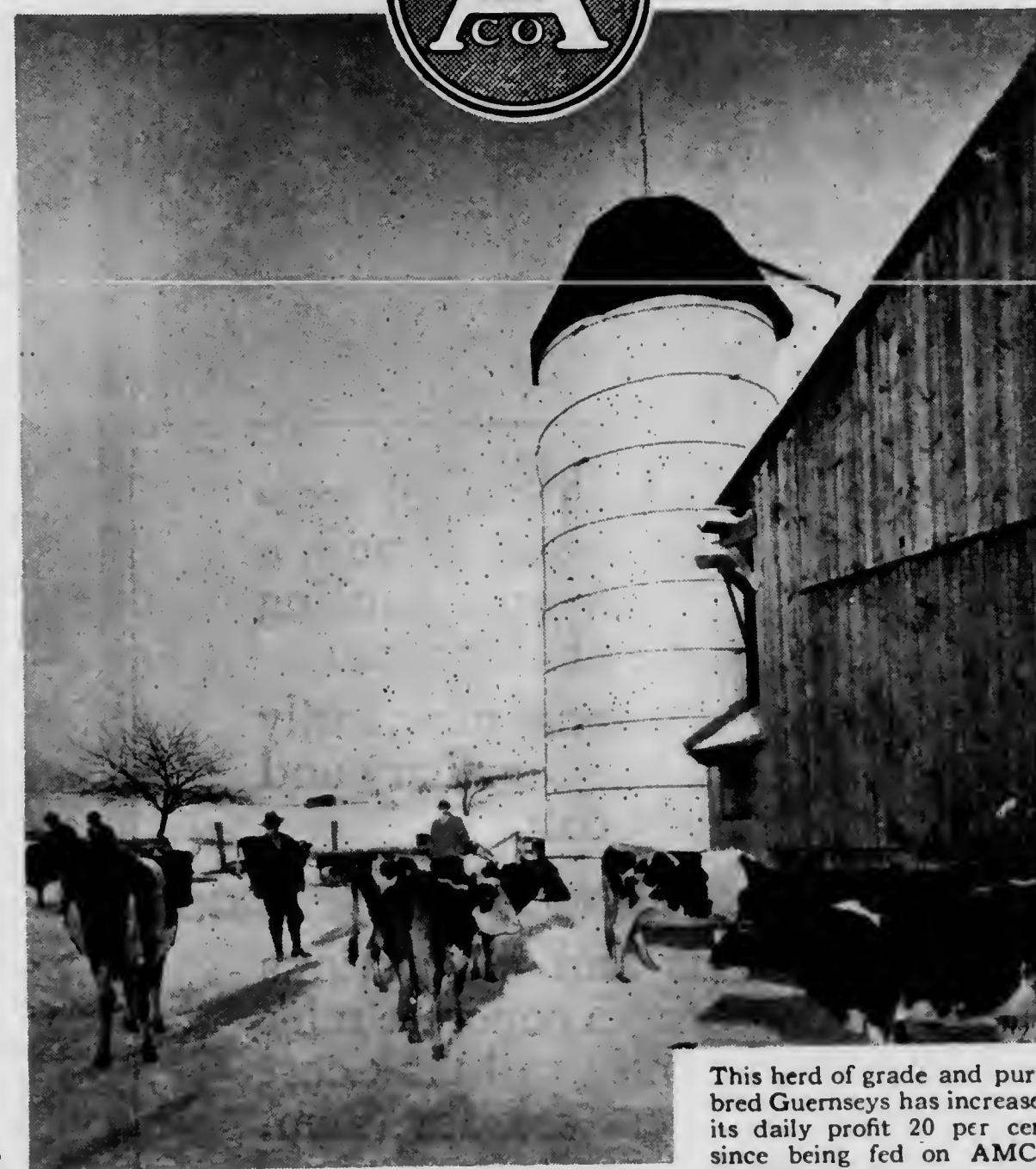
- (2) The butterfat differential of 6 cents per 1/10 per cent. B. F. will not be paid unless the bacteria requirements are met, nor will bacteria bonuses be paid unless the butterfat test is equal to, or higher than the minimum requirement of the delivery point where the milk is delivered. In other words, no premium of any kind except 4 cents per 1/10 per cent for butterfat above 3.50% will be paid unless the butterfat test of milk delivered is above the minimum butter fat requirement in effect at the delivery point where delivered and unless the bacteria requirements of class I, II, III or IV are met.

Illustration—

Shipper Brown delivers to the Oxford, Pa., Receiving Station. His milk tested 4.85% butterfat in March. The average bacteria count of his milk was 14,500. He had qualified for Class I bacteria bonuses three months during the summer of 1928, one of which was July or August. He is therefore a Class II Shipper in March, 1929.

The base price for 3.50% milk at Oxford is \$3.03 per 100 lbs. (See Table I). The combined Class II bacteria and butterfat payment for 4.85% butterfat milk is \$1.13 per 100 lbs. (See Table II). Shipper Brown's price for "A" milk in March is therefore \$3.03 plus \$1.13 or \$4.16 per 100 lbs.

NO. 4 OF A SERIES OF AMCO-FED HERDS



This herd of grade and purebred Guernseys has increased its daily profit 20 per cent since being fed on AMCO RATIONS. The owner, Mr. A. J. Bullers, of Jefferson County, Pa., is thoroughly pleased with his change of feed.

# AMCO

betters any herd!

A SOUND, certain step towards herd improvement is the use of AMCO DAIRY RATIONS. That is what Mr. A. J. Bullers found out when his herd made the biggest gain recorded in the Jefferson county (Pa.) Cow Test Association for 1928. His gain began when he swung over to AMCO RATIONS.

Every cow in Mr. Buller's herd has produced more milk, more fat, and more profit per day since he started to use AMCO. Milk production jumped from 21.4 pounds to 25.9 pounds per day, and butter fat from 1.17 to 1.37 pounds. The increase in daily profits above feed cost has been 20 per cent over his previous records!

Make your herd more valuable. If you have clover or alfalfa, use AMCO 20% DAIRY. Otherwise, use AMCO 24% DAIRY. These feeds supply the full nutrition needed by herds at this time of the year, after a winter of milk production. Keep them producing well and looking fit at a time when you might expect a slump. AMCO DAIRY RATIONS cannot be beaten for economy and performance in the interest of Pennsylvania Dairymen.

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Clean, cool milk until marketing time is certain with a cooling tank and cooling house, both of Concrete.

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Blueprints and instructions for building a concrete milk cooling house and tank cost nothing. Just ask for them.

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below 50°

Are you going to keep up your profits during the hot summer months? Are you going to earn the premiums paid for milk that's clean, cold and wholesome?

ESCO—the new Milk Cooling Cabinet—cools your milk to below 50 degrees, quickly, economically and efficiently. Operated with electric refrigeration. Controlled automatically. Designed especially for cooling milk on the dairy farm.

Ask your electric company, dairy supply dealer or electric refrigeration dealer, or write direct for full details.



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### "Herd About Town"

The new plant of Abbotts Dairies, Inc., at Easton, Md., has been completed and is now receiving milk. This is one of the most modern plants in the Philadelphia district, and probably one of the finest in the country.

Harbisons' Dairies are going forward with building a new receiving station at Carlisle, Pa. This plant will be modern in every respect, and will be provided with tanks for storing milk for shipment, and tank containers if necessary. It will be completed about June 1st.

It is reported that considerable difficulty is being encountered with the Straightaway can washer which has been installed at Easton, Md. The difficulty appears to be because of lack of uniformity in the farmers cans. Better types of can washers cannot successfully wash cans of various sizes and types. Experience at this plant emphasizes the importance of farmers standardizing on the 40 qt. flat top milk can.

It is reported that negotiations are under way by the Scott-Powell Company for the building of a milk plant at Laurel, Del. This plant will serve the needs of a community which is at present located some distance from any established milk plants.

Farmers in Worcester County, Md., are making fair preparations for handling milk by installing cork insulated concrete tanks in their milk houses. Special precautions are being taken on the farms in this county because of the fact that milk is delivered after milking hours in the evening. The farmers are storing the morning's milk on the farms instead of the night's milk, as is usually customary.

Castanea Dairies at Trenton have sent out notices requiring the signing up for T. B. test, for their entire "B" milk supply. This notice went out with the checks for February milk. The entire "A" milk supply for this company is already coming from Tuberculin Tested cows.

Bids are being received for the construction of a new milk plant for the Supplee-Wills-Jones Milk Co., at Martinsburg, W. Va. This plant when established will probably mark the dividing line between the Washington, Baltimore and Philadelphia territory. It will serve the north end of the famous Shenandoah Valley, which is rapidly turning to the dairy cow as an aid in the fruit and beef cattle farming of that district.

Abbotts Dairies, Inc., have purchased the retail business of the Cramer Dairies in Woodbury, N. J. This gives them distribution in thirteen additional boroughs in New Jersey, as well as Camden and East Camden.

The Dairy Council has just completed a reinspection of all the dairy farms supplying milk to the Bedford, Pa., receiving station of the Supplee-Wills-Jones Milk Co. A total of approximately 550 dairies were inspected.

Conditions on the farms inspected were very good and it is noticeable that it was not necessary to discontinue a single dairy.

### Provide Exercise for Sire

Now is a good time to plan for a suitable pen and yard for the herd bull. Bulls need exercise as well as good feed and care. No plan is as generally satisfactory as a large exercise yard connected with a suitable pen and the bull allowed to go in and out freely at all seasons of the year.

### BABY CHICKS

Order now for April and May delivery.  
Rhode Island Red Chicks, \$15 per 100; Barred Rocks, \$15 per 100; White Leghorn Chicks, \$12 per 100. Good straight stock, guaranteed delivery.  
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**RADIO IN EVERY ROOM**  
Single rooms, \$3.00 3.50 4.00  
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LUNCHEON .60 and .75  
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**Cuts Feeding Costs**  
Dry skim milk and water equals liquid skim milk for raising calves. 1 lb. dry skim milk added to 1 gal. water makes 1 gal. skim milk with the same feeding value. Your calves will thrive on it.

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If you want Big, Strong, Fluffy Chicks at honest prices that will make you money, get some of our Superlative Barred Rocks and Wonder Strain large English White Leghorns. Shipped C. O. D. post paid on our 100 per cent guarantee and special offer. Circular Free. Established 1905.

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Weights and grades guaranteed. Prompt shipment. Write for delivered prices.

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## Joint Educational Meetings Held in Philadelphia

Two joint educational conferences of the officers, directors and field men of the Inter-State Milk Producers' Association and the Philadelphia Dairy Council and groups of representatives of the agricultural extension departments of the State Colleges in Pennsylvania, Maryland, New Jersey and Delaware and the county agricultural extension agents in the Inter-State territory in those states, were held in the association's offices during the past month.

These meetings were held for the purpose of discussing marketing conditions and the studying of various problems entering into the economic production of and general milk marketing program in those respective territories.

The first meeting was held on March 13th, 1929, and was with the groups from the Pennsylvania State College and the county agents in the Inter-State territory of Pennsylvania.

### How to Adjust Milk Production in the Philadelphia Milk Shed

In a series of addresses led by F. P. Weaver and F. F. Lininger, of Pennsylvania State College, a very complete discussion of a detailed survey which has been made and the results which will shortly be printed and distributed in pamphlet form was studied.

This study includes a comprehensive report on the effectiveness of the Philadelphia Selling Plan, usually known as the "Basic and Surplus Plan."

The entire situation was thoroughly reviewed and discussed, including such factors as "its effect upon farmers on seasonal milk production;" "The effect on distance from market on returns for basic and surplus milk;" "Methods of changing seasonal production;" "Changes made in Breed of Cows in the last five years and changes contemplated in the near future;" "The effect of Fat Test of milk on the cost of production;" "The effect of Fat Test on return above the cost of producing milk;" together with many other incidental factors involving both production and selling methods.

These various discussions proved of the greatest interest and were taken part in by many members of the group.

The general sessions were in charge of H. D. Allebach, president of the Inter-State Milk Producers' Association and M. S. McDowell, of the Extension Department of Penn State College.

In addition to the representatives of the Inter-State Milk Producers' Association and the Dairy Council, the following representatives of Pennsylvania State College were present: F. P. Weaver, F. F. Lininger, E. B. Fitts, C. R. Gearhart, E. L. Moffett, J. H. Knodle, D. H. Bailey, G. G. Weber, R. E. Underwood, L. R. McManeuer, D. R. Pheasant, H. O. Wilcox, W. J. Bollinger, J. M. Fry, H. G. Niesley, P. L. Edinger, H. N. Reist, Charles S. Adams, M. D. Moore, R. G. Waltz, W. I. Galt, Ralph Peters, W. R. Gordon, R. S. Clark, J. C. Thompson, I. R. Yoder, C. K. Hallowell and W. F. Vandergrift.

### Second Day's Session

The joint conference with the group from Maryland, Delaware and New Jersey was held in the association offices on April 3rd.

Prof. F. P. Weaver and Prof. F. F. Lininger of Pennsylvania State College, presented to this group the same study presented to the Pennsylvania group being that which they have made on the effect of the Philadelphia Selling Plan on production methods in the Philadelphia Milk Shed. The discussion of the subject proved

just as interesting as it did when previously presented to the Pennsylvania group.

The afternoon session of this group was presided over by F. B. Symons, director of agricultural extension, Maryland State College.

Many interesting discussions of problems incident to the production of milk in Maryland, Delaware and New Jersey were discussed. President Allebach of the Inter-State Association outlined in detail many of the present problems and some of the proposed programs of the association. R. W. Balderston outlined the Dairy Council program while C. I. Cohee outlined at length the plans and programs of the Quality Control Department of the Dairy Council.

There was an extended discussion of these problems by the county agents in general and it was expressed that it was a direct challenge to the educators and the organization to better every phase of the industry for the good of the industry. This program was summed up by one speaker in the following words: "It is up to us to advocate clean milk, with proper cooling and hauling, better feeding programs, general herd betterment and better farm management. In other words produce high quality milk at a low cost of production and thus protect your own market."

Among those attending the second day's session in addition to the representatives of the Inter-State Milk Producers' Assn., and the Dairy Council were the following: W. S. Duryee, D. H. Agans, F. B. Bomberger, F. B. Symons, C. A. McCue, E. J. Perry, H. J. Baker, James P. Brown, Thos. H. Bartleson, H. T. Cottman, T. D. Holders, Ernest W. Grubb, E. I. Oswald, J. Z. Miller, Wm. R. McKnight, R. S. Brown, J. D. McKean, H. C. Barker, Geo. I. Ball, G. E. Lamb, Geo. B. Turpin, C. A. Thompson, E. A. Gauntt, A. S. Barnhart, D. M. Babbitt, Edw. Williams, Jr., R. G. Connelly, Russell E. Nelson, G. R. Snyder, A. D. Cobb, R. T. Grant, and C. Z. Keller.

### Indiana County Youth Leads Young Dairymen

Boys and girls in seven counties topped the butterfat production record with their junior cows in 4-H club work during December, J. F. Keim, assistant state club leader of the Pennsylvania State College, announces.

A Jersey owned by Edward Wetzel, Indiana county, led in butterfat production with 49.4 pounds in 899 pounds of milk.

Other records of leaders are: John F. Wehr, Union county, Holstein, 45.8 pounds of butterfat, 1091 pounds of milk; Leslie Hamilton, Westmoreland county, Holstein, butterfat 45.4 pounds milk, 1032 pounds; Richard Markle, Centre county, Holstein, 42.26 pounds of fat, 1243 pounds of milk; Robert McLean, Carbon county, Holstein, 42.08 pounds of fat, 1169 pounds of milk; Alfred Robinson, Wayne county, Jersey, 40.9 pounds of fat, 629 pounds of milk; George Simpson, Indiana county, Jersey, 38.1 pounds of fat, 732 pounds of milk; Goldie Griffith, Westmoreland county, Holstein, 37.28 pounds of fat, 1242.9 pounds of milk; Annabelle Hess, Clearfield county, Guernsey, 32.5 pounds of butterfat, 591 pounds of milk, and Charles Wetzel, Indiana county, Jersey, 32.2 pounds of fat, 512 pounds of milk.

During the past year 140 of the 681 boys and girls were enrolled in dairy club work.

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Large Bantam English S. C. White Leghorns..... Per 50 100 500 1000  
Silver Laced Wyandottes, Barred Rocks, S. C. Reds \$7 \$15 \$65 \$125  
Mammoth Light Brahmas..... \$8 \$15 \$72 \$140  
Sent parcel post prepaid, 100% live delivery guaranteed. 10% Books Order.  
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**More Butterfat** Holsteins average highest in yearly butterfat yield and predominate in the leading dairy states. 80% of the cows which have produced more than 1,000 lbs. butterfat in a year are Holsteins.  
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### Educational Entertainment

For your Community, Local or Club Meeting.

The Dairy Council has carried the message of "Milk for Health" to hundreds of thousands of producers and consumers in the Philadelphia Milk Shed.

### Lectures and Speakers on Health Programs ARE AVAILABLE

Motion Picture Films on Dairy Subjects  
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Posters  
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ARE YOURS FOR THE ASKING

Write us for detailed information and programs

Let us assist in Planning Your Entertainment

### Philadelphia Inter-State Dairy Council

R. W. BALDERSTON, Secretary

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### FOR SALE Proven Holstein Bull

Boiling Spring King Segis, whose daughters are exceeding records of dams in C. T. A. records.  
For details as to pedigree and record write H. D. ALLEBACH, Trappe, Pa.

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	Per 100
S. C. White Leghorns.....	\$11.00
Barred Rocks and Reds.....	15.00
White Rocks.....	14.00
Mixed.....	10.00
My parent stock is selected and culled for heavy layers. E. B. Thompson and Parks Strain. All good chicks. 100% live delivered. Special Price on Larger Orders. Circular Free.	
JACOB NIEMOND	Penna.
Box M, McAllisterville,	

### BARRON COUNTY DAIRY COWS

Modified Accredited Area  
HOLSTEINS—GUERNSEYS—JERSEYS  
We have for sale at all times, purebred and high grade cows of all breeds. You buy direct from the farmer. Driving and testing free. Fine Sales Pavilion for assembling.  
BARRON COUNTY HOLSTEIN BREEDERS ASSOCIATION  
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Voice from Under Hood: "No, I've never paid a cent for repairs on this car."  
Voice from Seat: "Yes, that's what the man who repaired it for you told me."  
—Louisville Satyr

### Extracts From an Address by Arthur M. Hyde, Sec'y U. S. Department of Agriculture.\*

The necessity for farm relief is no longer debatable. The discussions of that point upon every platform in the country during the last eight years have unified public opinion to a complete conviction of its necessity. The fact is frankly recognized that agriculture is not in the position of equality of other pursuits. This fact presents its own challenge to all of us that we do all we can, sanely and constructively, to re-establish for agriculture an equality of opportunity and open the way to the same standards of living that we are enjoying by industry.

Broadly it is proposed to attack the problem in three directions:

First, the revision of the tariff for better and greater protection of American agriculture. That subject is being dealt with elsewhere.

Second, reduction of transportation costs by development of inland waterways and highways. The advancement of this likewise lies in another quarter.

Third, the assistance of the Federal Government in reorganization of marketing systems through which the farmer may obtain a more economical and more stable outlet to the customer. There are some other fields of assistance to agriculture which I shall mention, which also bear upon the problem.

In assisting reorganization of the marketing system we have all of us conceived the creation of a great instrumentality which we have called the Federal Farm Board, with advisory committees, which should be given authority and resources with which to deal with this third category of problems. And it is not one problem. It is several hundred problems. Many of these problems are unknown to us today and will only be developed with experience. The scores of different agricultural commodities, the different localities of their origin, the different markets which they penetrate, their method and means of shipment, processing, and distribution, all point to the fact that we must find an agency to which each and all of the problems can be properly presented, considered, and upon which real and positive assistance can be given in solution.

We have to bear in mind that in their solution we are to a large extent blazing new trails, making our own experience as we go. And it therefore has appeared to me that as we cannot foresee in advance the circumstances under which the powers of the Board are to be called into action, any attempt to write out too detailed legislative directions would probably serve only to defeat the purpose of the Board. That is the heart of the plan and the rest are details.

We can perhaps get at the question of the sort of authority required if we consider the character of some of the problems and the means at hand for the administration of the remedies.

When we come to the question of agencies that the Farm Board should rely upon in the solution of these questions, we have at hand the large growth and the great experience of our co-operative marketing associations. They have already been organized by the farmers, they are farmer-controlled and farmer-owned. And in speaking of them I am not confining myself to the co-operative organizations as defined by the Capper-Volstead Act but I include the farmer-owned elevators, the clearing houses, the farmer pools, they are all in essence farmer co-operatives. Such organizations have pioneered the way under great difficulties, have educated a large group of farmers in the problems of marketing, developed sense and stability

in organization and management. We should take no action which would tend to supplant them or undermine their growth. It is largely upon these organizations that we should build the foundations of the collective action of the farmer. And such action will be more consonant with American life. We want to build up the farmers themselves to control their products, not to build up bureaucracy.

Let me repeat that there is little in the accumulated experience to guide the Board. It must make its own history, and guide each succeeding step it takes by the experience gained from the last. The mere enumeration of a few questions it must face is sufficient to show that there are many others that cannot be foreseen. All of which argues, to my mind, that if we are to create an instrumentality to which distressed agriculture can take its problems, that instrumentality must be clothed with broad and general authority.

\* From a statement made by Secretary Hyde before Senate and House Agricultural Committees.

### Farm Population Smallest In Twenty Years

The farm population of the United States is now the smallest in twenty years, reports the Bureau of Agricultural Economics, U. S. Department of Agriculture, which estimates the farm population of 27,511,000 persons on January 1, 1929, as compared with a peak of 32,000,000 persons in 1909.

The bureau's estimate also shows a decrease in farm population during the past year despite improved agricultural conditions and a slight slackening in industrial employment, the January 1, 1929, figure comparing with a farm population of 27,699,000 persons on January 1, 1928.

The decrease in farm population the past year would have been much greater were it not offset by an excess of births over deaths, the figures revealing that in the movement of population from and to farms, 1,960,000 persons left farms during the year, and 1,362,000 persons moved from cities to farms.

The movement away from farms slowed up somewhat during the year as compared with immediately preceding years, but the movement from cities to farms was also smaller. Thus it is shown that 1,960,000 persons left farms during the past year, compared with 1,978,000 in 1927, and with 2,155,000 in 1926. The movement from cities to farms was 1,362,000 persons last year, 1,374,000 in 1927, and 1,135,000 in 1926.

The large birthrate of 23 births per 1,000 persons and small death rate of 8 deaths per 1,000 persons has been a large factor offsetting the farm to city movement, so that the net loss of farm population last year was 188,000 persons, compared with 193,000 in 1927, and with 649,000 in 1926.

The bureau's figures show that in the New England States 65,000 persons left the farms last year and 60,000 went to farms; Middle Atlantic States 119,000 persons from farms and 93,000 persons to farms; East North Central 299,000 from farms and 218,000 to farms; West North Central, 372,000 from farms and 232,000 to farms; South Atlantic 266,000 from farms and 190,000 to farms; East South Central, 253,000 from farms and 167,000 to farms; West South Central, 327,000 from farms and 204,000 to farms; Mountain, 135,000 from farms and 95,000 to farms; Pacific, 124,000 from farms and 103,000 to farms.

If you are going to install a ventilation system to prevent damp stable walls next winter build the out-take flue from the mow floor to the eaves now while the mows are empty.

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S. C. White and Brown Leghorns 11c each. Barred Rocks 12c. S. C. Reds and S. C. Black Minorcas 14c. Mixed Broiler Chicks 9c each. \$80.00 per 1000. Hatched right and delivered right means half raised—\$1.00 will book your order. Catalog and price list free. Our Slogan: "Service after delivery."

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S. C. W. Leghorns—Wyckoff Strain.... \$100  
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Mixed or Broiler Chicks..... 9.00  
1/2 less in 500 lots, 1c less in 1,000 lots. 25 chicks add 2c. 50 chicks add 1c. Full count. 100% live arrival guaranteed. Partial post prepaid. Bank reference. Order direct from this adv. or write for free circular.

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### Production of Clean Milk\*

Extensive research, together with practical application of the conclusions drawn from such research, has proved conclusively that the production of milk of low bacterial count is dependent upon four essential factors: (1) clean healthy cows; (2) small-top milking pails; (3) sterilized utensils; (4) proper cooling. Other factors, of course, aid in the production of clean milk. Some are desirable for ethical reasons, some for economic. But in the final analysis the four essential factors as stated determine the bacterial count of the milk. There should be no slighting of any one factor. If small-top pails are used, the utensils sterilized, and the milk properly cooled, the milk produced will not be apt to comply with required standards if the cows from which the milk is drawn are dirty or unhealthy. The same logic is applicable to each of the "four essentials." Each factor is important—is essential.

Inspectors should keep these facts in mind and weigh accordingly the importance of each factor and detail necessary for the production of clean milk. The standard by which inspection should be judged as to its effectiveness is the quality of the milk produced. No hard or unbending rule can be adhered to in making inspections. The producer should be allowed a reasonable latitude in the choice of equipment he uses and the methods he follows.

If one producer uses a certain method for sterilization and the results are satisfactory and a different producer follows another procedure in sterilizing and his results are likewise satisfactory, the inspector should give due credit to both men. Requiring one definite and specific method or piece of equipment when other methods and equipment prove just as satisfactory will in all probability result in antagonism to the inspector and the system. The greatest and most lasting good will result when co-operation among the producers, dealers, consumers, and inspection service is obtained. This can be brought about only when common sense and reasonableness govern the activities of the inspection service and its personnel.

### The Coming National Holstein-Friesian Convention

The various committees having charge of the arrangements for the annual convention of the Holstein-Friesian Clubs of America, which will be held in Philadelphia, June 6th to 9th, 1929, are rapidly bringing their plans into definite form.

The Banquet Committee has completed its tentative plans and is now engaged in perfecting details. The banquet will be held at the Benjamin Franklin Hotel.

The Convention Publicity and Attendance Committee has been enlarged and now includes the following:

Allen Crissey, Salem, New Jersey, Chairman.  
A. A. Miller, Milk Producers' Review, Phila., Pa.  
Frank L. Devine, Chamber of Commerce, Phila., Pa.  
Dr. A. I. Bell, Medical Arts Bldg., Baltimore, Md.  
H. E. Moffett, Smyrna, Del.  
H. E. Echoltz, Grove City, Pa.  
Eugene Stapler, Yardley, Pa.  
Charles Wismer, Trappe, Pa.  
C. C. Ginrich, Lawn, Pa.  
J. D. Reynolds, Middletown, Del.  
Earl M. Tull, Seaford, Del., R. 2.  
J. R. Danks, Winterthur, Del.  
C. A. Spahr, York, Pa., R. D. 8.  
A. R. Bush, Montrose, Pa.  
Jesse E. Hurtz, Carlisle, Pa., R. D. 8.

### First Herdsman Short Course Proves Popular

Twenty-two enrolled in the herdsman's short course at the Pennsylvania State College recently. The departments of animal and dairy husbandry co-operated in giving the course.

Eleven Pennsylvania counties and the state of Maryland were represented. Indiana county sent four of the students and Franklin county three. Other counties were Bradford, Berks, Chester, Centre, Crawford, Erie, Juniata, Lancaster, and Westmoreland.

Those interested in dairy cattle fitting, showing, and management were given specialized training in the work, and the students desiring to fit, show, and care for general livestock got training along those lines. Both groups joined in the study of the general underlying principles of feeding, disease, breeding, and farm butchering.

This course was the first of its kind offered at Penn State, and the interest shown leads officials of the college to feel that it should be an annual event.

### Make Calves Comfortable

Dairy calves should have warm, dry, well-bedded stalls, and they will grow more satisfactorily if each calf has a stall by itself. If this is not possible then each calf should be tied with rope or fastened in stanchion during feeding. Be sure they do not suffer from thirst which often occurs even when they have milk to drink.

### Many Thin Woodlots

From all indications now, between 500 and 600 Pennsylvania farmers will do some constructive cutting in their home woodlands this year. From one to ten acres will be systematically thinned of the crooked, defective, scrubby and worthless trees. Those who began the work in other years are steadily enlarging the area of improved woodlot each winter.

### Improve Garden Soil

If your home garden is composed of a heavy stiff soil that has a tendency to become hard and form a crust after rains, it can be improved by turning under manure or any other vegetable matter. Coal ashes also are good but they add no fertility. Ten pounds of lime per square rod will improve the soil physically and aid in producing better crops.

### Keep Only Good Cows

Weed out the poor cows. The cost of producing a hundred pounds of milk often can be reduced extensively by selling two or three of the lowest producers. Make changes gradually and be sure that rations are balanced as nearly as possible. These practices pay.

### May He Follow in Father's Footsteps!

For Sale—High-grade Jersey bull eleven months old. Comes from sire with record of 425 lbs. butterfat per year.  
—Minnesota paper.

A more satisfactory winter egg production will be obtained from early hatched, vigorous, and well-grown pullets that carry a surplus of flesh. Late hatched, slow-maturing pullets should be culled from the laying flock and only the well-grown birds of desirable type should be kept. The culling out of the late hatched pullets removes one of the most common sources of roup infection and may tend to prevent the disease from gaining a foothold in the flock.

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